

## ***The 2004 Annual Report is dedicated to the memory of***

### ***Robert E. Bollesen***

Bob served as Regional Dean of Management Education at Northland Community and Technical College from 1997 to 2004. Bob passed away in January of 2005. Bob was an energetic, intelligent, and hardworking individual who dedicated his life to Agriculture. We have lost a true friend of Agriculture and caring family man. Bob was a special individual who will be remembered by those who knew and worked with him.

## ***Annual Report Overview***

The 2004 North Central and Northwestern Minnesota Farm Business Management Education Program Annual Report has been printed for the second time. The North Central and Northwestern Minnesota Report was developed through a partnership between the Northland Community & Technical College and Central Lakes Community & Technical College Farm Business Management Programs.

The North Central and Northwestern Minnesota Annual Report contains data from students enrolled in the Farm Business Management programs at Northland Community & Technical College and Central Lakes Community & Technical College. A complete list of Instructors who have students with data in this report can be found on page three (3). We believe that merging this data, from similar farming operations and environments, enables us to provide more complete farm financial information.

This report and the three (3) other regional reports include only statewide data for each of the livestock enterprises. Minnesota Farm Business Management Education Programs are committed to developing an even more valuable database of information for farmers. The increase in the number of farms included in each enterprise enhances the reliability and accuracy of the database. Regional livestock enterprise information can be obtained from each of the six Regional Farm Business Management Offices, or a Farm Business Management Instructor in that area.

Additional Note: The 2004 State Farm Business Management Education Program database includes data from over 2,200 farms. This information is unique to Minnesota and provides a wealth of information for farmers, the agriculture businesses that support those farmers, educators, and other interested individuals. Additional Farm Business Management database information is available from the Farm Business Management (FBM) Internet website, and from each of the regional offices listed on the inside front cover. Included on the FBM website is information about Management Programs, office locations and instructor information. Regional and state database reports, and links to other agriculture web pages can also be found at this website.

**State FBM Website: [www.mgt.org](http://www.mgt.org)**

**Northland College Website: [www.northlandcollege.edu](http://www.northlandcollege.edu)**

**Central Lakes College Website: [www.clcmn.edu](http://www.clcmn.edu)**

## TABLE OF CONTENTS

<u>Description</u>	<u>Page Number</u>
2004 Annual Report Dedication and Overview	1
Table of Contents	2
Instructors Participating and Explanation of Processing	3
Average money spent by each Farmer	4
Year at a Glance	5
Cash Farm Operating Income	6
Cash Farm Operating Expense and Accrual Adjustments	7
Profitability and Liquidity Measures	8
Five (5) Year Graphic History of Selected Financial Measures	9
Balance Sheet - "Cost Value Basis"	10
Balance Sheet - "Market Value Basis"	11
Financial Standards Measures and Evaluation Chart	12-13
Definitions of Financial Standards Measures and Graphic Summary	14-16
Statement of Cash Flows	17
Household & Personal Expense Reported & Non-Farm Summary	18-19
Operator and Labor Information	20
Financial Summary: Selected Factors sorted by Net Farm Income	21
Financial Summary: Selected Factors sorted by County	22-23
Financial Summary: Selected Factors sorted by Type of Farm	24-25
Financial Summary: Selected Factors sorted by Gross Income	26
Financial Summary: Selected Factors sorted by Crop Acres	27
Overview of Enterprise Tables	28
Five (5) Year Graphic History of Selected Crop Data	29
Corn	30-31
Corn Silage	32-33
Hay, Alfalfa	34-35
Hay, Mixed	36-37
Hay, Grass	38-39
Spring Wheat	40-41
Soybeans	42-43
Soybeans, Sorted by RoundUp Ready	44
Barley, Canola, and Sunflowers on Rented Land	45
Establish Alfalfa Hay	46
Irrigated Corn & Corn Silage	47
Oats	48
Prevented Planting and CRP	49
Twenty (20) Year History of Selected Crops	50
Dairy Cow Enterprise - Sorted by Herd Size	51
Dairy Cows	52-53
Graphic Summary of Selected Dairy Factors	54
Dairy Cows and Dairy Replacements Combined (All Dairy)	55
Dairy Replacement Heifers	56
Dairy Steers	57
Beef Backgrounding	58
Beef Cow-Calf	59
Hogs, Finish Feeder Pigs	60
Hogs, Farrow to Finish	61
Financial Trend Summary	62
Enterprise Trend Summary	63
Farm Business Management Program Information	64

## ***Instructors Participating***

Inside the front cover of this report, you will see a map of Minnesota. The farms included in this report are located in the shaded area on the map, Northern Minnesota. The instructors who work with the Farm Business Management students located in the shaded area, and their office locations, are listed below:

### **Northland College**

<u>Office Location:</u>	<u>Instructor</u>
Barnesville	Sheldon Schmiess
Baudette	Gerald Ausmus
Bemidji	Jim Sackett
Detroit Lakes	Mark Berg
Detroit Lakes	Paul Ramsey
East Grand Forks	Ron Dvergsten/Jon Christensen
Fertile	Jon Christensen/Dennis Olsen
Fosston	Doug Fjerstad
Hallock	Flint Daugherty
Hawley	Dennis Olsen
Mahnomen/Ulen	Mike Lockhart
Red Lake Falls	Greg Kalinoski
Roseau	Duane Jaenicke
Thief River Falls	Greg Dvergsten
Thief River Falls	Danie Packard

### **Central Lakes College**

<u>Office Location:</u>	<u>Instructor</u>
Aitkin	Brad Irwin
Iron	Jim Takala
Little Falls	Dave Stish
Milaca	Lee Todnem
Pierz	Ben Jorgensen
Staples	Bob Rick
Staples	Tom Schulz

The preparation of this report was done under the direction of Ron Dvergsten, Regional Dean of Management Education at Northland Community & Technical College; and DelRay Lecy, Regional Dean of Management Education at Central Lakes College. Directing in supervisory capacity were: Dr. Orley Gunderson, President, Northland Community & Technical College; Dr. Joe Birmingham, President, Central Lakes College; Dr. Jeff Thomas, Dean of Academic Affairs, Northland Community & Technical College; Rebecca Best, Associate VP of Academic Affairs, Central Lakes College; and John Murray, State Program Manager, Minnesota State Colleges and Universities. A special thank you goes to Shirley Judd, Central Lakes College, and Robin Langevin, Northland College, for their assistance in preparing this report.

## ***Explanation of Data Processing and Report Format***

The tables in this report were created using FINPACK and RankEm Central, copyrighted software of the Center for Farm Financial Management, University of Minnesota. Actual processing of the report was done at the Thief River Falls (NCTC) and Staples (CLC) Analysis Centers.

The financial portion of the report, found in the first 27 pages, uses a standard format for each of the tables. Data from the analysis system is printed in a four column format, that includes: Average, Low, Middle, & High. The High, Middle, & Low ranges are calculated based on a 20% slice of the farms in the total group.

The enterprise tables begin on page 30. Each of these tables consist of: a size indicator, a total and per unit income, direct & overhead expenses, and other information. Costs which are considered to be operating, whether easily assigned or are allocated, are listed as Direct Expenses. Costs which are general in nature, whether fixed or variable, are listed as Overhead Expenses.

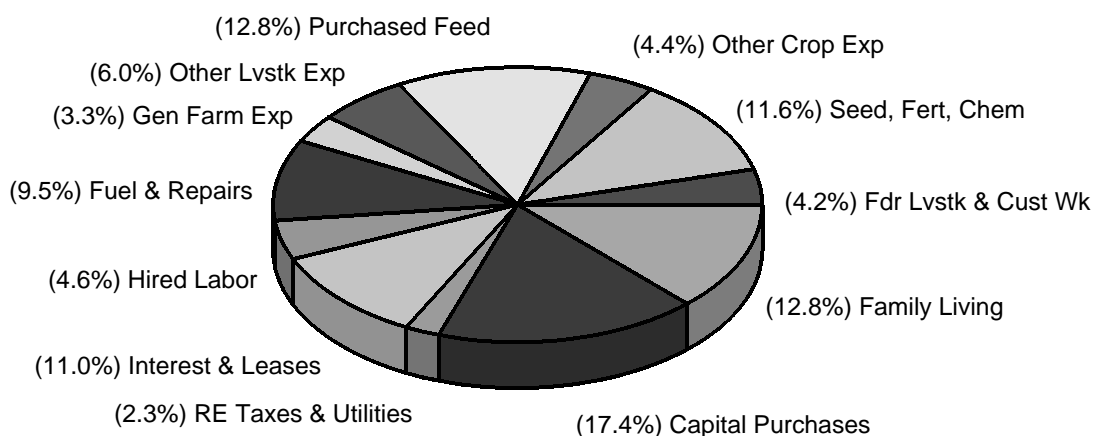
The Criteria for determining the 20% categories in each area are listed below:

<u>Analysis Section</u>	<u>Criteria to determine the "20%" categories</u>
Financial	Net Farm Income
Crops	Return to Overhead
Livestock	Return to Overhead

### Average Money Spent by Each Farmer

<b>Where the Money was Spent:</b>	<b>What the Money was used for:</b>	<b>Amount</b>
To Other Farmers	Feeder Livestock and Custom Work	\$14,508
To Agri-Business	Seed, Fertilizer, and Chemicals	\$40,413
	Other Direct Crop Expense	\$15,222
	Purchased Feed	\$44,567
	Other Direct Livestock Expense	\$20,757
	Fuel, Lubricants & Repairs	\$32,917
	General Farm Expenses	\$11,487
Individuals	Hired Labor	\$16,080
Utility Company	Utilities	\$5,754
Lenders or Other Farmers	Use of Capital: Interest & Leases	\$38,257
Local Government	Real Estate Taxes	\$2,158
Agri-Business or Other Farmers	Breeding Livestock, Machinery, Equipment, Buildings, Land, and Other.	\$60,425
Household and Personal Expense	Food, Clothing, Furnishings, Education, Contributions, Medical, Gifts, Recreation, Taxes, Capital Expenditures & Investments.	\$44,432
<b>Average Money Spent by Each Farmer in the Community:</b>		<b>\$346,977</b>
<b>Increase in Money Spent by Each Farmer, compared to 2003:</b>		<b>\$43,344</b>
<b>Average Money Spent by Each Farmer in a 30 Yr Career:</b>		<b>\$10,409,310</b>
<b>Money Spent in Community by 417 Farmers:</b>		<b>\$144,689,409</b>

### Percent Spending by Category



<b>Year at a Glance</b> <i>"2004 Annual Report"</i>	<b>Area</b> <b>Average</b>	<b>State</b> <b>Ave.</b>	<b>Local</b> <b>Ave.</b>	<b>Your</b> <b>Farm</b>	<b>Your</b> <b>Goal</b>
	<b>417</b> <b><u>Farms</u></b>	<b>2234</b> <b><u>Farms</u></b>			
<b><u>Pages 6 &amp; 7:</u></b>					
Gross Cash Farm Income	\$306,049	\$438,358	_____	_____	_____
Total Cash Operating Expense	\$242,120	\$359,325	_____	_____	_____
Net Cash Farm Income	\$63,929	\$79,033	_____	_____	_____
Net Operating Profit	\$71,180	\$97,715	_____	_____	_____
Net Farm Income	\$51,656	\$72,761	_____	_____	_____
<b><u>Page 11:</u></b>					
Total Assets - 12/31	\$900,916	\$1,273,818	_____	_____	_____
Total Liabilities - 12/31	\$430,308	\$590,327	_____	_____	_____
Net Worth - 12/31	\$470,609	\$683,491	_____	_____	_____
Change in Net Worth	\$49,186	\$74,211	_____	_____	_____
<b><u>Page 12:</u></b>					
Working Capital - 12/31	\$44,506	\$76,346	_____	_____	_____
Debt to Asset Ratio - 12/31	51%	49%	_____	_____	_____
Rate of Return on Farm Assets - Cost	6.7%	8.0%	_____	_____	_____
Rate of Return on Farm Equity - Cost	8.0%	10.9%	_____	_____	_____
Capital Replacement Margin	\$24,251	\$35,569	_____	_____	_____
Asset Turnover Rate	39.9%	45.6%	_____	_____	_____
Operating Expense Ratio	71.4%	73.3%	_____	_____	_____
Interest Expense Ratio	5.9%	5.2%	_____	_____	_____
<b><u>Page 18 &amp; 19:</u></b>					
Total Cash Family Living Expense	\$33,990	\$40,527	_____	_____	_____
Total Non Farm Income	\$20,124	\$21,616	_____	_____	_____
<b><u>Page 20:</u></b>					
Average Age of the Farmer	46.4	46.0	_____	_____	_____
Average Years Farming	22.0	22.7	_____	_____	_____

Net Farm Income dollars must pay for Family Living, Social Security and Income Tax, Retirement Accounts, Medical and Health expenses, and loan principle payments.

The following list shows 2004 expenses:

Family Living (Excl Health/Med)	\$28,188
Social Security and Income Tax	\$3,556
Health and Medical Expense	\$5,802
Retirement Accounts	\$1,817
Principle Payments	\$36,200
Balance	(\$23,907)

**Farm Income Statement**  
**Northland & Central Lakes Community and Technical Colleges**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	417	83	84	84
<b>Sale of Crops</b>				
Barley	1,684	2,598	202	4,767
Beans, Navy	880	661	1,479	964
Beans, Pinto	770	1,055	1,479	1,145
Beans, Other Edible	427	327	-	216
Canola	2,303	2,393	356	4,031
Corn	9,753	10,598	8,824	12,627
Corn Silage	570	420	451	884
Grass Seeds	1,167	455	-	4,256
Hay, Alfalfa	3,382	1,737	2,485	6,891
Hay, Mixed & Grass	923	1,247	205	854
Oats	489	303	289	1,059
Potatoes	1,646	4,606	3,189	429
Soybeans	25,239	10,288	22,318	37,485
Sunflowers	927	764	345	802
Sunflowers, Confectionary	1,005	2,225	12	1,297
Wheat, Spring	32,807	18,249	25,147	55,095
Wheat, Winter	498	808	399	210
Miscellaneous crop enterprises	2,132	413	294	1,767
Miscellaneous crop income	362	118	-	-
<b>Total Crop Sales</b>	<b>86,964</b>	<b>59,265</b>	<b>67,474</b>	<b>134,779</b>
<b>Sale of Livestock</b>				
Beef Cow-Calf, Beef Calves	6,827	7,071	8,435	4,792
Beef, Backgrounding	4,138	8,797	388	5,932
Beef, Finishing	5,365	1,688	4,312	2,464
Dairy, Milk	131,887	21,329	96,197	383,413
Dairy, Dairy Calves	1,914	440	1,554	5,047
Dairy Heifers (for sale)	2,296	2,178	915	486
Dairy Steers	6,359	2,608	7,165	6,873
Hogs, Farrow-Fin, Raised Hogs	225	204	12	40
Hogs, Finish Feeder Pigs	2,964	-	-	14,384
Hogs, Weaning to Finish	3,946	-	-	19,588
Miscellaneous livestock enterprises	3,121	3,559	758	1,819
Cull breeding livestock	7,816	3,490	6,169	18,357
Misc. livestock income	1,187	1,077	2,919	386
<b>Total Livestock &amp; Product Sales</b>	<b>178,045</b>	<b>52,441</b>	<b>128,824</b>	<b>463,581</b>
<b>Other farm income</b>				
LDP payments	1,906	1,070	1,526	3,450
Direct & CC govt payments	9,507	6,191	7,648	16,017
CRP payments	992	1,795	752	778
Livestock govt payments	1,388	208	1,299	3,181
Other government payments	609	318	372	661
Custom work income	3,265	2,975	2,668	3,722
Patronage dividends, cash	1,227	1,161	854	2,248
Insurance income	16,527	11,136	12,922	29,306
Cash from hedging accts	1,236	364	717	2,401
Other farm income	4,383	2,657	3,512	10,489
<b>Total Other Farm Income</b>	<b>41,040</b>	<b>27,875</b>	<b>32,270</b>	<b>72,253</b>
<b>Gross Cash Farm Income</b>	<b>306,049</b>	<b>139,581</b>	<b>228,568</b>	<b>670,613</b>

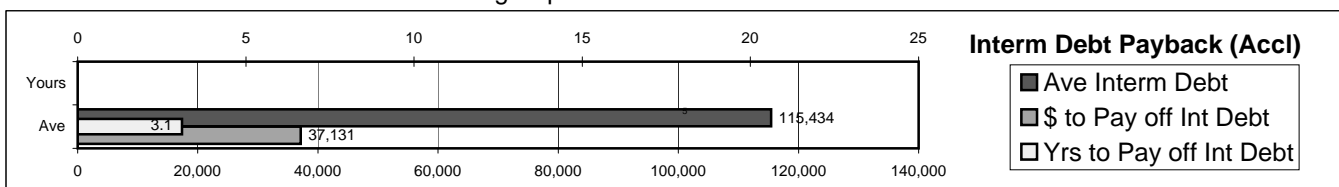
**Farm Income Statement**  
**Northland & Central Lakes Community and Technical Colleges**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
<b>Number of farms</b>	<b>417</b>	<b>83</b>	<b>84</b>	<b>84</b>
<b>Direct Crop Expense</b>				
Seed	12358	8571	10185	20553
Fertilizer	17,106	13,030	12726	26,749
Crop chemicals	10,949	5,748	8,910	19,354
Crop insurance	5477	3019	4365	8894
Drying fuel	989	964	820	1391
CCC buyback	4087	2736	1864	4167
Crop marketing	1,986	3,571	1,381	2662
Crop miscellaneous	2,683	2,154	2,143	3,319
<b>Total Direct Crop Expense</b>	<b>55,635</b>	<b>39,793</b>	<b>42,394</b>	<b>87,089</b>
<b>Direct Livestock Expense</b>				
Feeder livestock purchase	7973	7025	3413	13211
Purchased feed	44,567	12,197	34264	120,249
Breeding fees	1,434	191	1,108	3,808
Veterinary	5062	1301	3699	13382
BST	737	45	379	2588
Supplies	5612	1642	5492	12880
DHIA	501	17	451	1273
Contract production exp.	2818	-	901	10592
Livestock hauling and trucking	1,347	494	1,628	2,216
Livestock marketing	1,964	583	1626	4,287
Bedding	1,282	191	885	4,467
<b>Total Direct Livestock Expense</b>	<b>73,297</b>	<b>23,686</b>	<b>53,846</b>	<b>188,953</b>
<b>Other Farm Expense</b>				
Interest	17,807	13,499	13,498	33,525
Fuel & oil	11,828	8838	10,341	20,322
Repairs	21,089	14,188	16488	38227
Custom hire	6,535	4,533	3,944	13,680
Hired labor	16080	5805	9666	46828
Land rent	15,994	8722	12470	27,214
Machinery & bldg leases	4456	2546	2460	12645
Real estate taxes	2,158	1,895	2,035	3,179
Farm insurance	4,404	3,414	3,629	7977
Utilities	5,754	3,484	4,756	10,805
Dues & professional fees	1,411	867	1,181	2,898
Hedging account deposits	1,593	866	396	6,127
Miscellaneous	4,079	2,467	4,585	7,626
<b>Total Other Farm Expense</b>	<b>113,188</b>	<b>71,124</b>	<b>85,449</b>	<b>231,053</b>
<b>Total cash expense</b>	<b>242,120</b>	<b>134,603</b>	<b>181,689</b>	<b>507,095</b>
<b>Net cash farm income</b>	<b>63,929</b>	<b>4,978</b>	<b>46,879</b>	<b>163,518</b>
<b>Inventory Changes</b>				
Crops and feed	-9,800	-11,166	-9941	-2,547
Market livestock	1,179	273	582	2,688
Accounts receivable	15,411	835	12975	34,948
Prepaid expenses and supplies	986	-68	1,869	2,675
Accounts payable	-523	-1,034	-746	2,195
<b>Total inventory change</b>	<b>7,252</b>	<b>-11,160</b>	<b>4,739</b>	<b>39,959</b>
<b>Net operating profit</b>	<b>71,180</b>	<b>-6,182</b>	<b>51,617</b>	<b>203,477</b>
<b>Depreciation and Other Capital</b>				
Breeding livestock	-2,920	-5,620	-2,124	-2,319
Machinery and equipment	-13,925	-10,451	-11,311	-23,798
Buildings and improvements	-3,012	-1,263	-1,677	-8,140
Other farm capital	332	-80	-283	1,645
<b>Total depr. and capital adj</b>	<b>-19,524</b>	<b>-17,413</b>	<b>-15,395</b>	<b>-32,612</b>
<b>Net farm income</b>	<b>51,656</b>	<b>-23,595</b>	<b>36,222</b>	<b>170,864</b>

**Profitability and Liquidity Measures**  
**Northland & Central Lakes Community and Technical Colleges**  
**(Farms Sorted By Net Farm Income)**

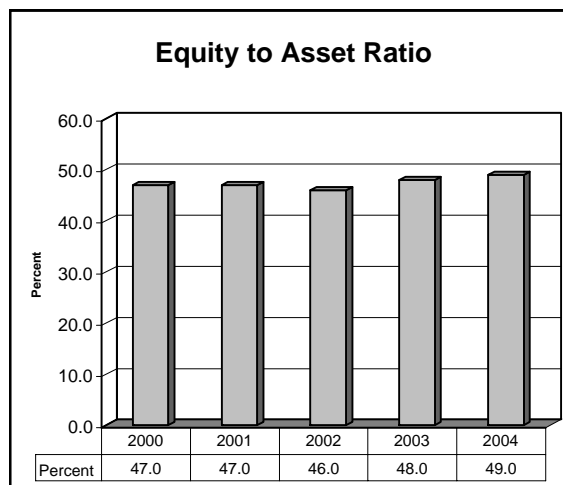
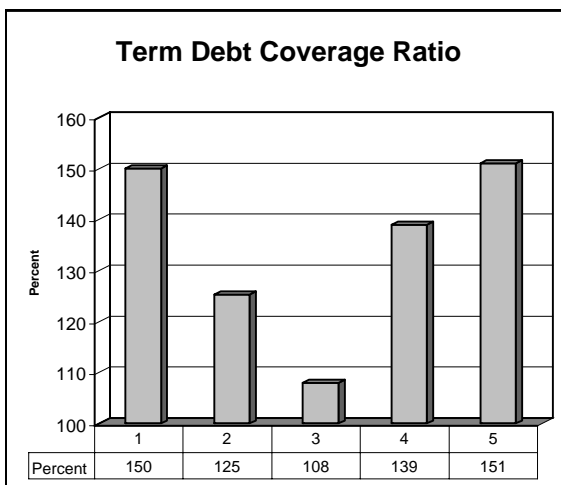
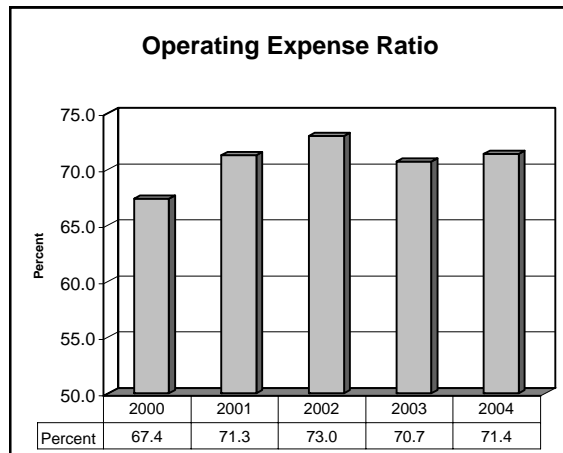
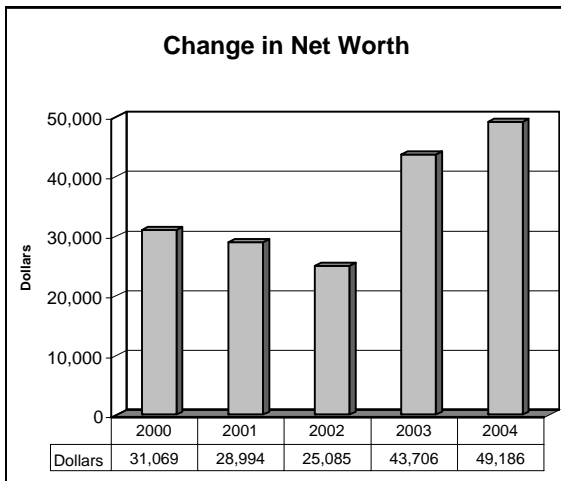
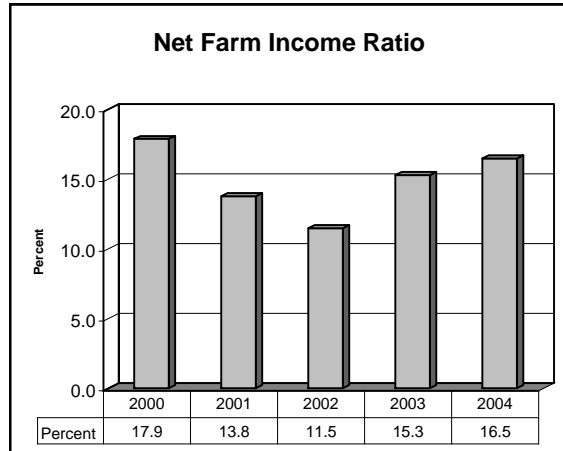
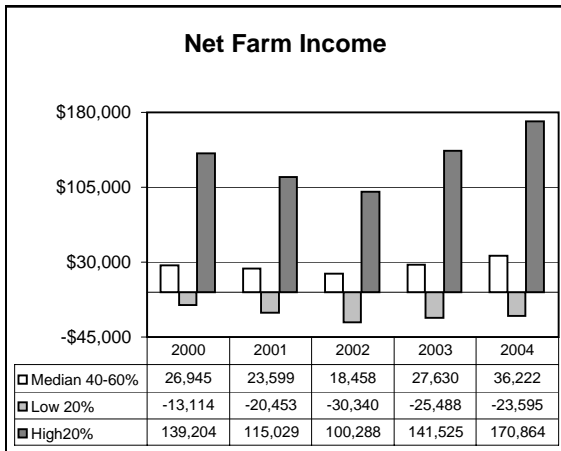
	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	417	83	84	84
<b>Profitability (assets valued at cost)</b>				
Net farm income	51,656	-23,595	36,222	170,864
Labor and management earnings	33,061	-35,286	21,220	134,660
Rate of return on assets	6.70%	-5.80%	5.00%	13.30%
Rate of return on equity	8.00%	-21.60%	4.60%	21.20%
Operating profit margin	16.70%	-25.30%	13.20%	28.30%
Asset turnover rate	39.90%	22.80%	37.40%	47.00%
Interest on farm net worth	18,595	11,691	15,002	36,204
Farm interest expense	18,402	14,932	14,117	33,799
Value of operator lbr and mgmt.	27,079	17,834	24,849	43,253
Return on farm assets	42,978	-26,498	25,489	161,410
Average farm assets	645,296	459,636	514,253	1,211,681
Return on farm equity	24,577	-41,430	11,373	127,611
Average farm equity	307,114	191,391	245,040	601,655
Value of farm production	257,377	104,682	192,382	569,922
<b>Liquidity (cash)</b>				
Net cash farm income	63,929	4,978	46,879	163,518
Net nonfarm income	20,120	37,895	14,914	12,880
Family living and taxes	37,102	32,070	34,340	54,115
Principal due on long term debt	9,815	8,146	7,826	17,589
Cash available for interm. debt	37,131	2,657	19,627	104,694
Average intermediate debt	115,434	79,385	88,931	209,443
Years to turnover interm. debt	3.1	29.9	4.5	2
Expense as a % of income	79%	96%	79%	76%
Interest as a % of income	6%	10%	6%	5%
<b>Liquidity (accrual)</b>				
Total accrual farm income	312,838	129,523	232,183	705,702
Total accrual operating expense	241,657	135,705	180,566	502,225
Net accrual operating income	71,180	-6,182	51,617	203,477
Net nonfarm income	20,120	37,895	14,914	12,880
Family living and taxes	37,102	32,070	34,340	54,115
Principal due on long term debt	9,815	8,146	7,826	17,589
Available for intermediate debt	44,383	-8,503	24,366	144,653
Average intermediate debt	115,434	79,385	88,931	209,443
Years to turnover interm. debt	2.6	**	3.6	1.4
Expense as a % of income	77%	105%	78%	71%
Interest as a % of income	6%	12%	6%	5%

\*\* Income insufficient to meet debt servicing requirements





## Five Year History of Selected Financial Measures



**Balance Sheet at Cost Values**  
**Northland & Central Lakes Community and Technical Colleges**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	417	83	84	84
<b>Assets</b>				
<b>Current Farm Assets</b>				
Cash and checking balance	8,576	7,986	4,256	18,666
Prepaid expenses & supplies	10,679	5,974	9,280	18,868
Growing crops	924	561	242	2,827
Accounts receivable	24,288	12,022	21,153	48,855
Hedging accounts	1,373	427	431	5,140
Crops held for sale or feed	67,703	35,868	49,055	142,014
Crops under government loan	5,970	5,494	3,969	7,338
Market livestock held for sale	23,337	16,891	17,529	32,180
Other current assets	1,108	855	175	1,425
Total current farm assets	143,957	86,077	106,090	277,314
<b>Intermediate Farm Assets</b>				
Breeding livestock	88,894	34,081	72,486	217,421
Machinery and equipment	164,678	135,060	130,130	283,760
Titled vehicles	4,625	4,767	3,883	5,469
Other intermediate assets	11,646	11,707	8,448	19,832
Total intermediate farm assets	269,842	185,615	214,946	526,482
<b>Long Term Farm Assets</b>				
Farm land	161,221	136,966	154,154	225,417
Buildings and improvements	86,144	48,505	51,274	222,393
Other long-term assets	9,671	3,851	7,697	21,363
Total long-term farm assets	257,036	189,322	213,125	469,172
Total Farm Assets	670,836	461,014	534,162	1,272,968
Total Nonfarm Assets	92,364	100,826	73,887	115,809
Total Assets	763,200	561,840	608,049	1,388,777
<b>Liabilities</b>				
<b>Current Farm Liabilities</b>				
Accrued interest	4,104	5,004	3,667	3,801
Accounts payable	10,384	7,716	9,627	19,253
Current notes	50,562	46,801	41,202	72,556
Government crop loans	5,345	4,971	3,561	6,373
Principal due on term debt	29,057	18,715	22,244	56,617
Total current farm liabilities	99,452	83,207	80,301	158,600
Total intermediate farm liabs	96,006	70,285	74,580	172,145
Total long term farm liabilities	151,372	125,001	125,935	280,007
Total farm liabilities	346,829	278,494	280,816	610,752
Total nonfarm liabilities	18,680	26,488	11,775	26,215
Total liabilities	365,509	304,982	292,591	636,967
Net worth (farm and nonfarm)	397,691	256,858	315,457	751,810
Net worth change	39,532	-13,645	22,767	131,637
<b>Ratio Analysis</b>				
Current farm liabilities / assets	69 %	97 %	76 %	57 %
Curr. & interm farm liab. / assets	47 %	56 %	48 %	41 %
Long term farm liab. / assets	59 %	66 %	59 %	60 %
Total debt to asset ratio	48 %	54 %	48 %	46 %

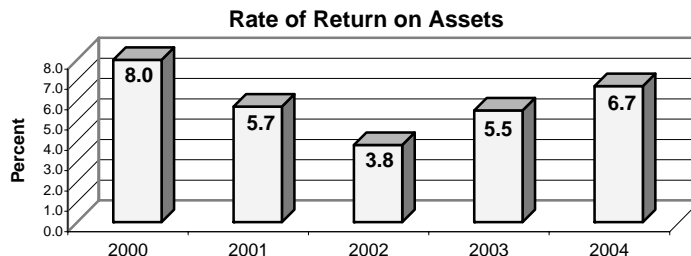
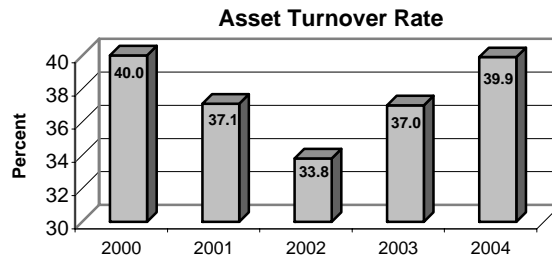
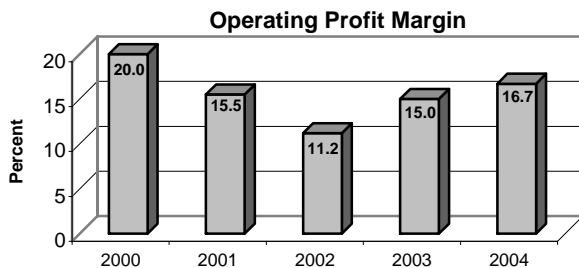
**Balance Sheet at Market Values**  
**Northland & Central Lakes Community and Technical Colleges**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	417	83	84	84
<b>Assets</b>				
<b>Current Farm Assets</b>				
Cash and checking balance	8,576	7,986	4,256	18,666
Prepaid expenses & supplies	10,679	5,974	9,280	18,868
Growing crops	924	561	242	2,827
Accounts receivable	24,288	12,022	21,153	48,855
Hedging accounts	1,373	427	431	5,140
Crops held for sale or feed	67,703	35,868	49,055	142,014
Crops under government loan	5,970	5,494	3,969	7,338
Market livestock held for sale	23,337	16,891	17,529	32,180
Other current assets	1,108	855	175	1,425
Total current farm assets	143,957	86,077	106,090	277,314
<b>Intermediate Farm Assets</b>				
Breeding livestock	90,664	35,766	75,464	219,307
Machinery and equipment	198,733	157,665	157,829	333,594
Titled vehicles	4,890	4,791	3,987	5,647
Other intermediate assets	11,693	11,758	8,645	19,979
Total intermediate farm assets	305,980	209,980	245,926	578,527
<b>Long Term Farm Assets</b>				
Farm land	244,248	211,688	236,885	313,700
Buildings and improvements	96,280	58,050	62,252	239,665
Other long-term assets	9,556	3,847	7,341	21,254
Total long-term farm assets	350,085	273,585	306,477	574,620
Total Farm Assets	800,022	569,643	658,493	1,430,461
Total Nonfarm Assets	100,894	108,959	77,757	133,825
Total Assets	900,916	678,601	736,250	1,564,285
<b>Liabilities</b>				
<b>Current Farm Liabilities</b>				
Accrued interest	4,104	5,004	3,667	3,801
Accounts payable	10,384	7,716	9,627	19,253
Current notes	50,562	46,801	41,202	72,556
Government crop loans	5,345	4,971	3,561	6,373
Principal due on term debt	29,057	18,715	22,244	56,617
Total current farm liabilities	99,452	83,207	80,301	158,600
Total intermediate farm liabs	96,006	70,285	74,580	172,145
Total long term farm liabilities	151,372	125,001	125,935	280,007
Total farm liabilities	346,829	278,494	280,816	610,752
Total nonfarm liabilities	18,680	26,488	11,775	26,215
Total liabs excluding deferreds	365,509	304,982	292,591	636,967
Total deferred liabilities	64,799	43,419	50,824	111,341
Total liabilities	430,308	348,401	343,416	748,308
Retained earnings	397,691	256,858	315,457	751,810
Market valuation equity	72,918	73,342	77,378	64,167
Net worth (farm and nonfarm)	470,609	330,200	392,835	815,977
Net worth excluding deferreds	535,407	373,619	443,659	927,318
Net worth change	49,186	-2,690	28,410	135,211
<b>Ratio Analysis</b>				
Current farm liabilities / assets	69 %	97 %	76 %	57 %
Curr. & interm farm liab. / assets	43 %	52 %	44 %	39 %
Long term farm liab. / assets	43 %	46 %	41 %	49 %
Total debt to asset ratio	48 %	51 %	47 %	48 %
Debt to assets excl deferreds	41 %	45 %	40 %	41 %

**Financial Standards Measures**  
**Northland & Central Lakes Community and Technical Colleges**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	417	83	84	84
<b>Liquidity</b>				
Current ratio	1.45	1.03	1.32	1.75
Working capital	44,506	2,870	25,789	118,713
<b>Solvency (market)</b>				
Farm debt to asset ratio	51%	56%	50%	50%
Farm equity to asset ratio	49%	44%	50%	50%
Farm debt to equity ratio	105%	128%	101%	101%
<b>Profitability (cost)</b>				
Rate of return on farm assets	6.70%	-5.80%	5.00%	13.30%
Rate of return on farm equity	8.00%	-21.60%	4.60%	21.20%
Operating profit margin	16.70%	-25.30%	13.20%	28.30%
Net farm income	51,656	-23,595	36,222	170,864
<b>Repayment Capacity</b>				
Term debt coverage ratio	151%	38%	128%	228%
Capital replacement margin	24,251	-22,094	9,559	109,820
<b>Efficiency</b>				
Asset turnover rate (cost)	39.90%	22.80%	37.40%	47.00%
Operating expense ratio	71.40%	93.20%	71.70%	66.40%
Depreciation expense ratio	6.20%	13.40%	6.60%	4.60%
Interest expense ratio	5.90%	11.50%	6.10%	4.80%
Net farm income ratio	16.50%	-18.20%	15.60%	24.20%

**Operating Profit Margin X Asset Turnover Rate = Rate of Return on Farm Assets**



## How Does Your Farm Stack Up?

Below is a summary of the low, average, and high farms for recent years using 16 key management factors. Some factors have a "credit risk rating" shown above the bar, and an \* at the left. The ratings are from "Weighing the Variables", a book by David M. Kohl, Virginia Tech, VA. The "Green" indicates the business enjoys a competitive position, the "Yellow" indicates the business has caution signs, and "Red" indicates the business could face some major obstacles in that area. Please be reminded that these credit risk breakpoints are generic in nature and should be viewed over a 5 year period.

**For additional information, please see the back cover of this report. A "Financial Scorecard" is provided in color for your use.**

<b>Evaluation Chart</b>		<b>Low Farms</b>		<b>Average</b>		<b>High Farms</b>		<b>Your Farm</b>	
		<b>2004</b>	<b>5 Yr Ave</b>	<b>2004</b>	<b>5 Yr Ave</b>	<b>2004</b>	<b>5 Yr Ave</b>	<b>2004</b>	<b>Ave</b>
<b>Liquidity</b>		<b>Red &lt; 1.0 &gt;</b>		<b>Yellow &lt; 1.5 &gt;</b>		<b>Green</b>			
* Current Ratio		1.03	0.91	1.45	1.43	1.75	1.72		
Working Capital	\$	2,870	(7,709)	44,506	36,603	118,713	113,023		
<b>Solvency (Market)</b>		<b>Red &lt; 70% &gt;</b>		<b>Yellow &lt; 30% &gt;</b>		<b>Green</b>			
* Farm Debt to Asset Ratio	%	56%	59%	51%	53%	50%	51%		
Farm Equity to Asset Ratio	%	44%	41%	49%	47%	50%	49%		
Farm Debt to Equity Ratio	%	128%	145%	105%	111%	101%	102%		
<b>Profitability (Cost)</b>		<b>Red &lt; 0.0% &gt;</b>		<b>Yellow &lt; 8.0% &gt;</b>		<b>Green</b>			
* Rate of Return on Farm Assets	%	-5.8%	-4.7%	6.7%	5.9%	13.3%	11.9%		
Rate of Return on Farm Equity	%	-21.6%	-22.1%	8.0%	5.5%	21.2%	17.1%		
Operating Profit Margin	%	-25.3%	-20.6%	16.7%	15.7%	28.3%	26.1%		
Net Farm Income	\$	(23,595)	(22,600)	51,656	39,305	170,864	133,382		
<b>Repayment Capacity (Accrual)</b>		<b>Red &lt; 110% &gt;</b>		<b>Yellow &lt; 150% &gt;</b>		<b>Green</b>			
* Term Debt Coverage Ratio	%	38%	52%	151%	135%	228%	205%		
Capital Replacement Margin	\$	(22,094)	(18,707)	24,251	15,124	109,820	75,780		
<b>Efficiency</b>									
Asset Turnover Rate (Cost)	%	22.8%	23.3%	39.9%	37.6%	47.0%	45.5%		
		<b>Red &lt; 80% &gt;</b>		<b>Yellow &lt; 65% &gt;</b>		<b>Green</b>			
* Operating Expense Ratio	%	93.2%	87.4%	71.4%	70.8%	66.4%	65.1%		
Depreciation Expense Ratio	%	13.4%	15.3%	6.2%	6.9%	4.6%	5.2%		
		<b>Red &lt; 25% &gt;</b>		<b>Yellow &lt; 10% &gt;</b>		<b>Green</b>			
* Interest Expense Ratio	%	11.5%	13.0%	5.9%	7.3%	4.8%	5.7%		
Net Farm Income Ratio	%	-18.2%	-15.7%	16.5%	15.0%	24.2%	23.9%		

---

## ***Financial Guideline Measures***

---

The Farm Financial Standards Task Force recommended the use of sixteen financial measures to evaluate a farm's financial position and financial performance. These measures are grouped by: Liquidity, Solvency, Profitability, Repayment Capacity, and Efficiency.

### **Liquidity**

Liquidity is the ability of the farm business to meet financial obligations in a timely manner, without disrupting normal business operations.

**Current Ratio:** The current ratio shows the value of current assets relative to current liabilities. It measures the extent current farm assets, if liquidated, would cover liabilities that are due during the next 12 months. The higher the ratio, the safer the short term position.

**Working Capital:** Working capital shows the dollar amount that current assets can or cannot cover current liabilities. It approximates the amount of capital available to purchase crop and livestock inputs and equipment necessary to produce farm products. The amount of working capital considered adequate must be related to the size of the farm business.

### **Solvency**

Solvency is important in evaluating the risk position of the farm and family and in considering future borrowing capacity. Solvency measures the ability of the business to pay off all debts if liquidated.

**Farm Debt To Asset Ratio:** The farm debt to asset ratio measures the financial position or solvency of the farm or ranch by comparing the total liabilities to the total assets. It measures the portion of the farm assets that have debt against them. A higher ratio is considered an indicator of greater financial risk.

**Farm Equity To Asset Ratio:** The farm equity to asset ratio measures the farm equity relative to the value of the farm assets. It measures the proportion of the farm assets financed by the owner's equity whereas the debt to asset ratio measured the proportion of farm assets financed by debt.

**Farm Debt To Equity Ratio:** The farm debt to equity ratio measures the amount of farm debt relative to the amount of farm equity. It measures the amount of debt the farm has for every dollar of equity the farm has.

### **Profitability**

Profitability is the measure of the value of goods produced by the business in relation to the cost of resources used in the production. Profitability calculated on a cost basis does not consider changes in market valuation of capital assets such as machinery and breeding livestock.

**Rate of Return on Assets:** Rate of return on assets is, in effect, the interest rate your farm earned in the past year on all money invested in the business. If assets are valued at market value, the rate of return on investment can be looked at as the "opportunity cost" of investing money in the farm instead of alternative investments. If assets are valued at cost (cost less depreciation), the rate of return represents the actual return on the average dollar invested in the business.

**Rate of Return on Equity:** Rate of return on equity is, in effect, the interest rate your investment in the business earned in the past year. If assets are valued at market value, this return can be compared with returns available if the assets were liquidated and invested in alternative investments. If assets are valued at cost, this represents the actual return to the amount of equity capital you have invested in the farm business.

---

## ***Financial Guideline Measures***

---

If your return on assets is higher than your average interest rate, your return on equity will be still higher, reflecting the fact that there are residual returns to equity capital after paying all interest expense. This is positive use of financial leverage. If your return on assets is lower than your average interest rate, your return on equity will be still lower, reflecting the fact that borrowed capital did not earn enough to pay its interest cost. This is negative financial leverage. As your debt to asset ratio increases, these relationships become more pronounced. So profitability becomes a key concern when substantial debt capital is used in the business.

**Net Farm Income:** Net farm income represents the returns to labor, management, and equity capital invested in the business. Without income from other sources, or appreciation of capital asset values, net farm income must cover family living expenses and taxes, or net worth will decrease.

**Operating Profit Margin:** The operating profit margin is a measure of the profit margin from the employment of assets. It measures how effectively you are employing assets relative to the value of output produced. Low prices, high operating expenses, or production problems are all possible causes of a low operating profit margin.

### **Repayment Capacity**

Repayment capacity measures the ability to repay term debt (longer than one year) and to replace capital assets.

**Term Debt Coverage Ratio:** The term debt coverage ratio measures the ability of the business to cover all term debt payments. A number less than 100 percent indicates that the business, plus non-farm income, is not generating sufficient cash to meet all of the debt payments, after family living expenses and taxes have been paid. A number greater than 100 indicates the business is generating sufficient cash to pay all term debt obligations with some surplus margin remaining.

**Capital Replacement Margin:** The capital replacement margin is the amount of money remaining from farm and non-farm income after all operating expenses, taxes, family living and debt payments have been paid. It is the amount available for acquiring capital assets, such as machinery and land, or servicing additional debt.

### **Efficiency**

These measures reflect the relationships between expense and income items to revenue and the efficiency of the farm business with regard to the use of cash and capital assets.

**Asset Turnover:** Asset turnover is a measure of how efficiently assets are used in the business. A farm with good operating profit margin and asset turnover will show a strong rate of return on farm assets. If operating profit margin is low, the asset turnover rate must be strong, or vice versa, to maintain the rate of return on assets.

**Operating Expense Ratio:** This ratio indicates the percent of the gross farm income, which is used to pay the operating expenses. Operating expenses do not include interest or depreciation expense.

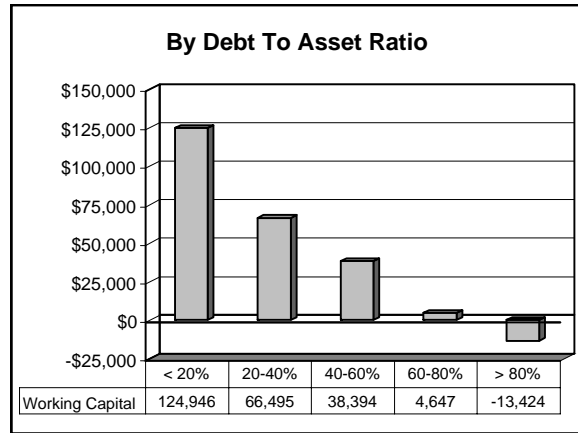
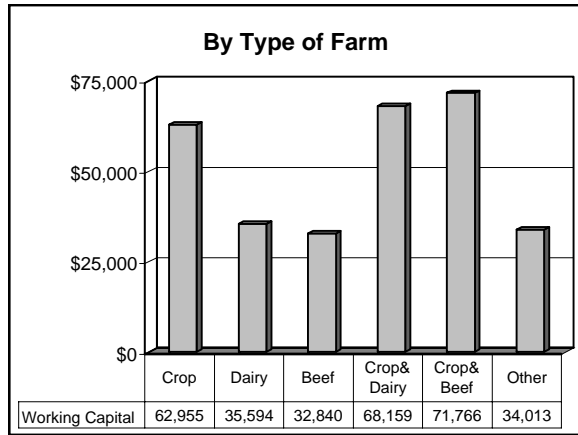
**Depreciation Expense Ratio:** This ratio indicates the percent of the gross farm income, which is used to cover the depreciation expense.

**Interest Expense Ratio:** This ratio indicates the percent of the gross farm income, which is used to pay farm interest expenses.

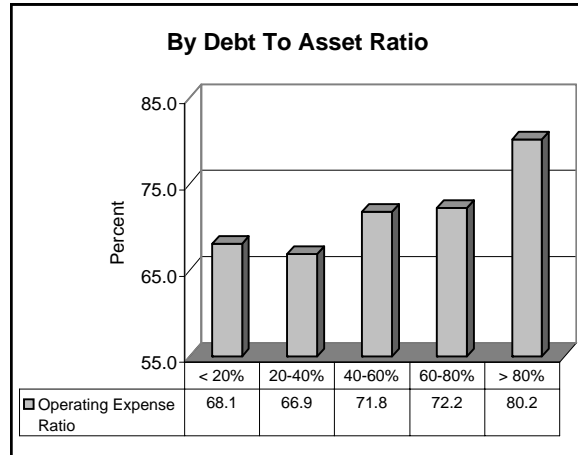
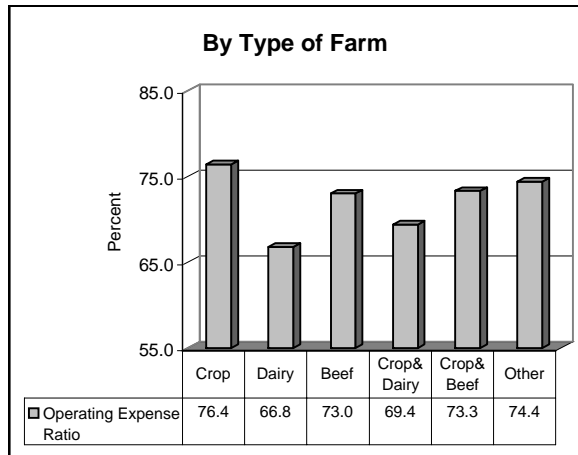
**Net Farm Income Ratio:** The ratio indicates the percent of the gross farm income, which remains after all expenses.

## Selected Financial Guideline Measures

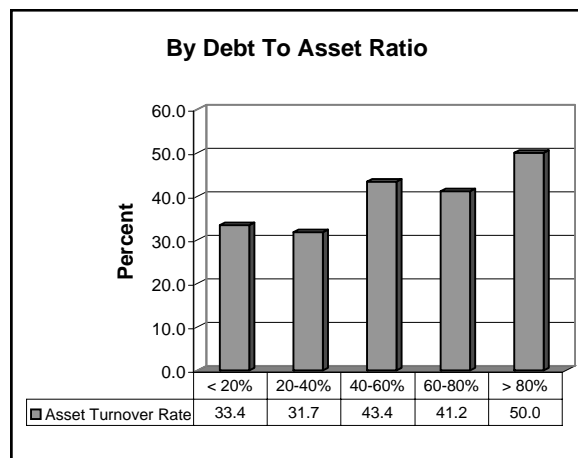
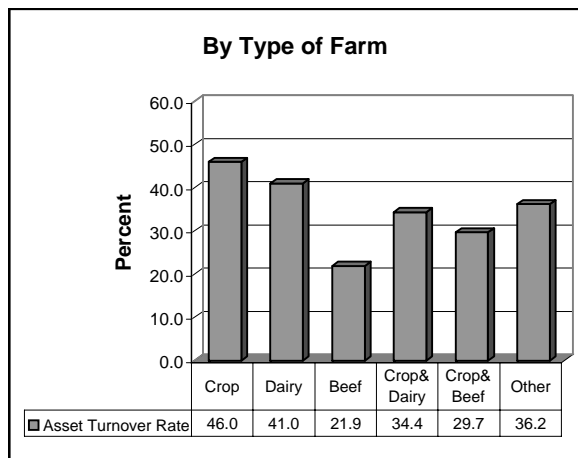
### Working Capital



### Operating Expense Ratio



### Asset Turnover Rate





**Statement Of Cash Flows**  
**Northland & Central Lakes Community and Technical Colleges**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	417	83	84	84
Beginning cash (farm & nonfarm)	9,781	11,685	5,025	14,475
<b>Cash From Operating Activities</b>				
Gross cash farm income	306,049	139,581	228,568	670,613
Net nonfarm income	20,120	37,895	14,914	12,880
Total cash farm expense	-242,120	-134,603	-181,689	-507,095
Apparent family living expense	-33,869	-28,969	-31,675	-48,656
Income and social security tax	-3,127	-3,100	-2,665	-5,324
Cash from operations	47,052	10,804	27,453	122,417
<b>Cash From Investing Activities</b>				
Sale of breeding livestock	2,685	2,168	2,039	4,064
Sale of machinery & equipment	2,040	2,429	748	4,069
Sale of titled vehicles	15	-	-	76
Sale of farm land	3,951	6,000	4,199	6,273
Sale of farm buildings	350	151	1,429	5
Sale of other farm assets	116	96	100	247
Sale of nonfarm assets	2,920	861	503	3,099
Purchase of breeding livestock	-10,247	-7,290	-6,338	-23,824
Purchase of machinery & equip.	-30,150	-15,980	-20,475	-60,604
Purchase of titled vehicles	-1,261	-599	-367	-1,725
Purchase of farm land	-9,330	-2,404	-9,171	-12,777
Purchase of farm buildings	-8,474	-5,402	-7,662	-14,541
Purchase of other farm assets	-963	-500	-609	-2,129
Purchase of nonfarm assets	-7,436	-5,425	-8,085	-10,946
Cash from investing activities	-55,784	-25,895	-43,691	-108,712
<b>Cash From Financing Activities</b>				
Money borrowed	130,577	113,591	118,869	173,333
Cash gifts and inheritances	1,534	2,603	560	251
Principal payments	-121,354	-99,042	-102,500	-179,940
Dividends paid	-106	-1	-	-134
Gifts given	-221	-437	-75	-505
Cash from financing activities	10,431	16,714	16,853	-6,996
Net change in cash balance	1,699	1,623	615	6,709
Ending cash (farm & nonfarm)	11,480	13,307	5,640	21,184

**Household and Personal Expenses**  
**Northland & Central Lakes Community and Technical Colleges**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	74	14	15	10
Average family size	3.5	2.9	3.9	4.5
<b>Family Living Expenses</b>				
Food and meals expense	6,511	5,845	6,648	8,181
Medical care	2,785	2,964	2,013	3,890
Health insurance	3,017	1,987	2,109	4,213
Cash donations	1,083	1,014	1,131	1,495
Household supplies	3,199	3,221	4,074	5,631
Clothing	1,065	632	1,149	1,825
Personal care	2,999	2,167	3,248	5,200
Child / Dependent care	210	284	196	119
Alimony and Child support	86	441	-	-
Gifts	1,441	1,357	863	1,829
Education	908	509	804	1,387
Recreation	1,495	1,246	1,699	1,751
Utilities (household share)	1,604	1,462	968	2,269
Nonfarm vehicle operating expense	2,340	2,200	3,121	1,645
Household real estate taxes	314	677	540	-
Dwelling rent	143	2	164	-
Household repairs	1,351	2,346	695	694
Nonfarm interest	662	1,604	391	458
Disability / Long term care insuran	266	410	184	212
Life insurance payments	1,253	596	1,413	1,707
Nonfarm property insurance	34	51	12	-
Miscellaneous	1,226	311	2,290	1,500
Total cash family living expense	33,990	31,323	33,713	44,004
Family living from the farm	549	372	615	338
Total family living	34,540	31,694	34,328	44,342
<b>Other Nonfarm Expenditures</b>				
Income taxes	3,656	3,765	1,404	6,672
Furnishing & appliance purchases	127	263	154	152
Nonfarm vehicle purchases	1,010	-140	2,728	1,255
Nonfarm real estate purchases	2,791	1,975	190	11,963
Other nonfarm capital purchases	361	-	438	-
Nonfarm savings & investments	1,817	2,099	2,121	1,842
Total other nonfarm expenditures	9,761	7,962	7,037	21,884
Total cash family living investment & nonfarm capital purch	43,751	39,285	40,750	65,888

**Nonfarm Summary**  
**Northland & Central Lakes Community and Technical Colleges**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	417	83	84	84
<b>Nonfarm Income</b>				
Nonfarm wages & salary	14,011	25,957	9,804	8,728
Net nonfarm business income	1,722	4,206	1,187	955
Nonfarm rental income	139	157	189	117
Nonfarm interest income	248	612	108	273
Nonfarm cash dividends	106	220	8	146
Tax refunds	1,233	1,702	1,038	979
Other nonfarm income	2,666	5,040	2,581	1,681
Total nonfarm income	20,124	37,895	14,914	12,880
Gifts and inheritances	1,534	2,603	560	251
<b>Nonfarm Assets (market)</b>				
Checking & savings	2,904	5,321	1,384	2,518
Stocks & bonds	3,449	1,304	1,892	10,005
Other current assets	1,473	2,030	137	1,659
Furniture & appliances	8,932	9,884	8,339	9,186
Nonfarm vehicles	9,182	12,112	8,254	10,495
Cash value of life ins.	4,771	3,723	4,092	8,217
Retirement accounts	17,356	15,173	7,780	28,739
Other intermediate assets	6,929	9,566	4,694	5,691
Nonfarm real estate	39,832	48,566	37,970	50,062
Other long term assets	6,067	1,279	3,214	7,252
Total nonfarm assets	100,894	108,959	77,757	133,825
<b>Nonfarm Liabilities</b>				
Accrued interest	60	251	8	27
Accounts payable	1,260	2,254	2,092	711
Current notes	954	2,630	552	249
Princ due on term debt	1,709	2,220	1,415	1,977
Total current liabilities	3,982	7,355	4,067	2,964
Intermediate liabilities	3,975	6,252	3,547	2,485
Long term liabilities	10,722	12,881	4,162	20,766
Total nonfarm liabilities	18,680	26,488	11,775	26,215
Nonfarm net worth	82,214	82,470	65,982	107,610
Nonfarm debt to asset ratio	19 %	24 %	15 %	20 %

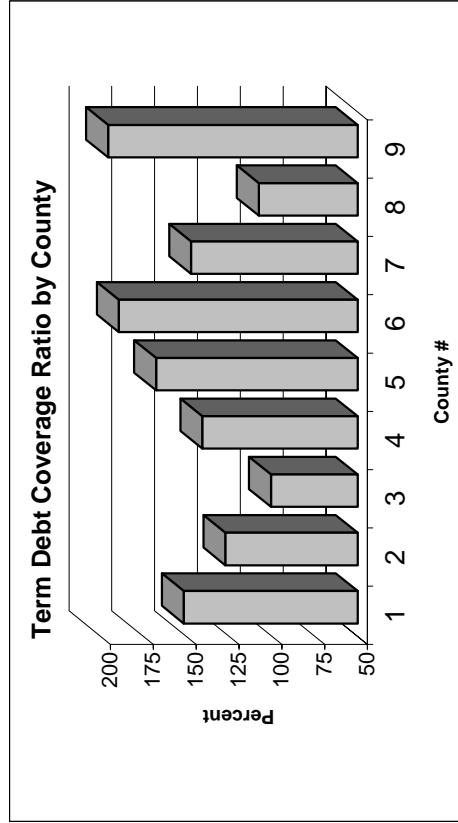
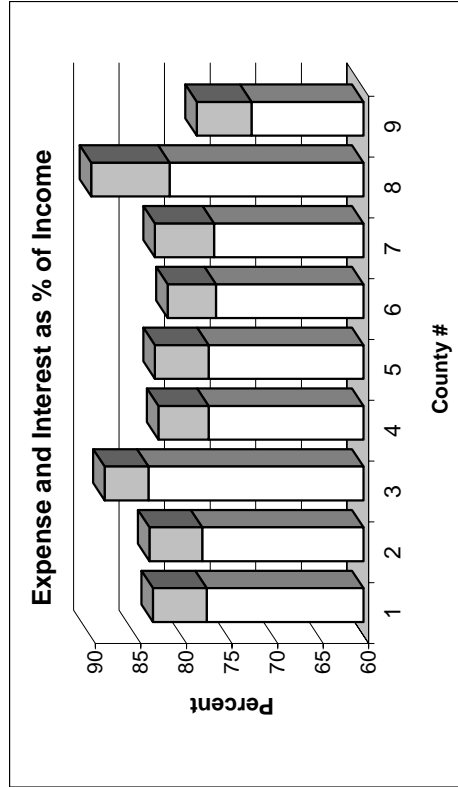
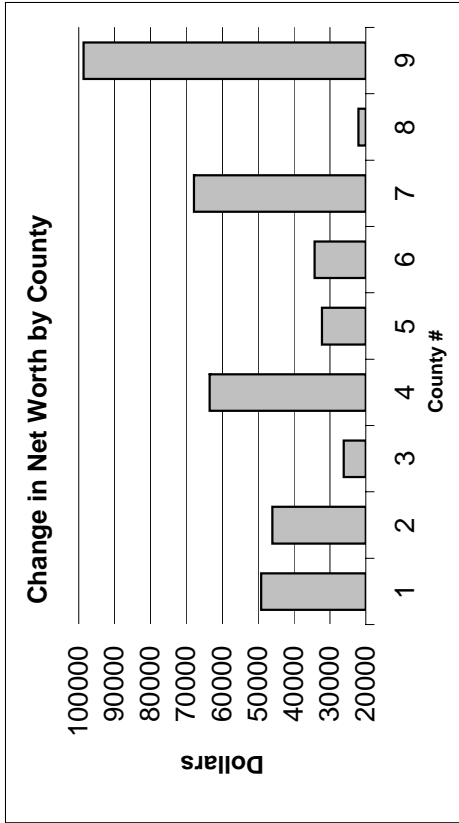
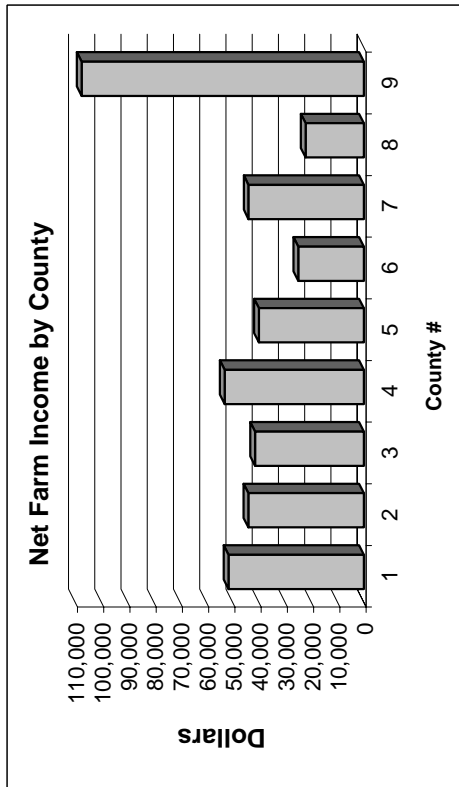
**Operator and Labor Information**  
**Northland & Central Lakes Community and Technical Colleges**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	417	83	84	84
<b>Operator Information</b>				
Average number of operators	1.2	1.1	1.1	1.5
Average age of operators	46.4	47.3	46.5	45.3
Average number of years farming	22.0	22.8	22.1	22.7
<b>Results Per Operator</b>				
Working capital	36,955	2,562	22,683	81,271
Total assets (market)	748,073	605,634	647,592	1,070,904
Total liabilities	357,304	310,939	302,062	512,289
Net worth (market)	390,768	294,695	345,530	558,615
Net worth excl deferred liabs	444,574	333,445	390,234	634,839
Gross farm income	259,764	115,596	204,224	483,121
Total farm expense	216,871	136,654	172,364	366,148
Net farm income	42,892	-21,058	31,860	116,973
Net nonfarm income	16,707	33,820	13,118	8,818
Family living & tax withdrawals	30,808	28,621	30,205	37,047
Total acres owned	333.3	355.2	292.0	366.8
Total crop acres	598.0	458.1	501.7	782.3
Crop acres owned	222.7	213.5	189.7	269.1
Crop acres cash rented	359.6	233.4	282.1	501.7
Crop acres share rented	15.7	11.3	29.9	11.5
Total pasture acres	30.1	22.6	26.6	19.3
<b>Labor Analysis</b>				
Number of farms	417	83	84	84
Total unpaid labor hours	2,973	2,059	2,997	4,369
Total hired labor hours	1,728	611	924	4,855
Total labor hours per farm	4,700	2,670	3,921	9,224
Unpaid hours per operator	2,468	1,838	2,636	2,991
Value of farm production / hour	54.76	39.21	49.07	61.79
Net farm income / unpaid hour	17.38	-11.46	12.08	39.11
Average hourly hired labor wage	9.98	10.07	11.99	9.81
<b>Partnerships &amp; LLCs</b>				
Number of farms	52	9	8	18
Number of operators	2.1	1.8	2.0	2.3
Owner withdrawals per farm	39,586	-	-	51,066
Withdrawals per operator	19,001	-	-	21,885
<b>Corporations</b>				
Number of farms	12	2	-	3
Number of operators	1.8	-	-	-

**Financial Summary**  
**Northland & Central Lakes Community and Technical Colleges**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	417	83	84	84
<b>Income Statement</b>				
Gross cash farm income	306,049	139,581	228,568	670,613
Total cash farm expense	242,120	134,603	181,689	507,095
Net cash farm income	63,929	4,978	46,879	163,518
Inventory change	7,252	-11,160	4,739	39,959
Depreciation and capital adjust	-19,524	-17,413	-15,395	-32,612
Net farm income	51,656	-23,595	36,222	170,864
<b>Profitability (cost)</b>				
Labor and management earnings	33,061	-35,286	21,220	134,660
Rate of return on assets	6.7 %	-5.8 %	5.0 %	13.3 %
Rate of return on equity	8.0 %	-21.6 %	4.6 %	21.2 %
Operating profit margin	16.7 %	-25.3 %	13.2 %	28.3 %
Asset turnover rate	39.9 %	22.8 %	37.4 %	47.0 %
<b>Liquidity</b>				
Ending current ratio	1.45	1.03	1.32	1.75
Ending working capital	44,506	2,870	25,789	118,713
End working capital to gross inc	14.5 %	2.1 %	11.3 %	17.7 %
Term debt coverage ratio	151.5 %	38.2 %	127.5 %	227.7 %
Expense as a percent of income	77.2 %	104.8 %	77.8 %	71.2 %
Interest as a percent of income	5.9 %	11.5 %	6.1 %	4.8 %
<b>Solvency (market)</b>				
Number of farms	417	83	84	84
Ending farm assets	800,022	569,643	658,493	1,430,461
Ending farm liabilities	409,364	319,593	330,523	718,382
Ending total assets	900,916	678,601	736,250	1,564,285
Ending total liabilities	430,308	348,401	343,416	748,308
Ending net worth	470,609	330,200	392,835	815,977
Net worth change	49,186	-2,690	28,410	135,211
Ending farm debt to asset ratio	51 %	56 %	50 %	50 %
Beg total debt to asset ratio	50 %	50 %	47 %	52 %
End total debt to asset ratio	48 %	51 %	47 %	48 %
<b>Nonfarm Information</b>				
Net nonfarm income	20,120	37,895	14,914	12,880
Farms reporting living expenses	103	19	19	17
Total family living expense	31,585	30,593	32,314	37,801
Total living, invest, & capital	45,188	41,531	43,652	67,189
<b>Crop Acres</b>				
Total acres owned	401	398	332	536
Total crop acres	720	513	570	1,143
Total crop acres owned	268	239	216	393
Total crop acres cash rented	433	261	321	733
Total crop acres share rented	19	13	34	17

## Selected Factors by County Group



County #	1	2	3	4	5	6	7	8	9
Countries	All Farms	Kittson Roseau Marshall	Pennington Polk Red Lake	Clay Mahnommen Norman Wilkin	Becker Otter Tail Wadena Douglas	Beltrami Clearwater Koochiching LOW	Aitkin Cass Carlton Crow Wing Hubbard Itasca St. Louis	Isanti Kanabec Mille Lacs Pine Sherburne Washington	Benton Morrison Todd Stearns

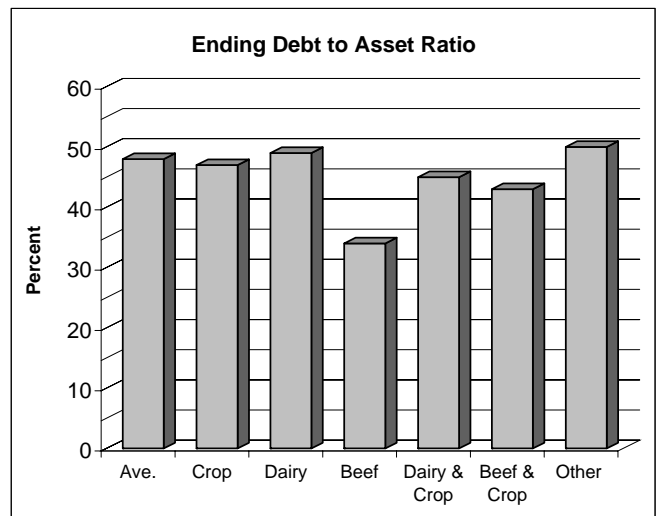
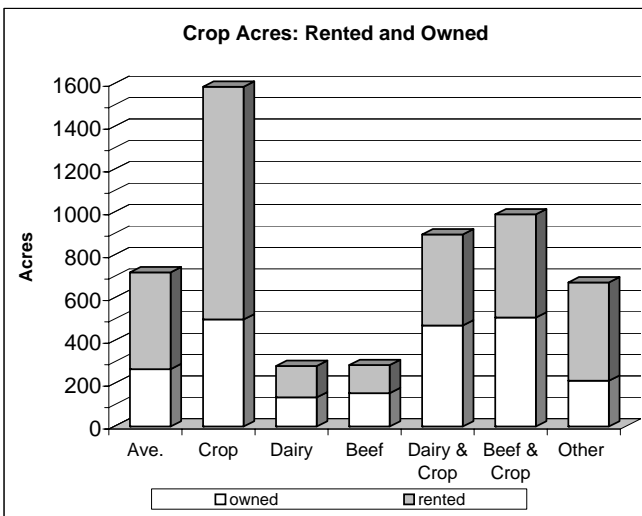
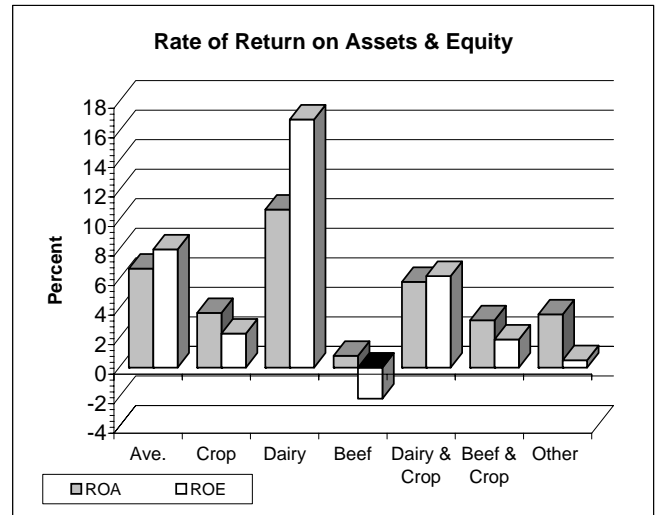
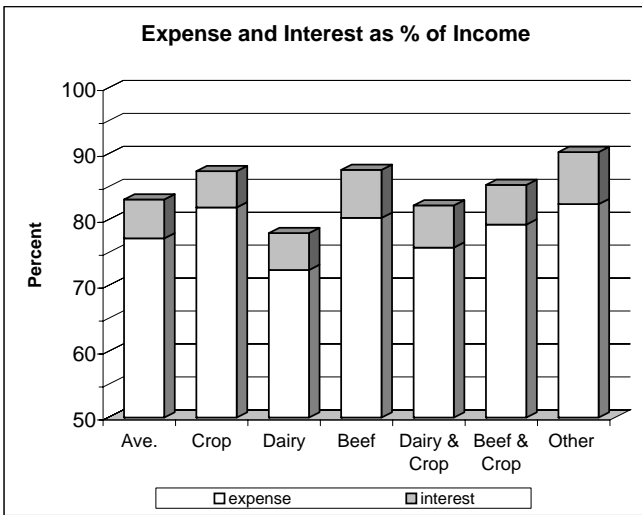
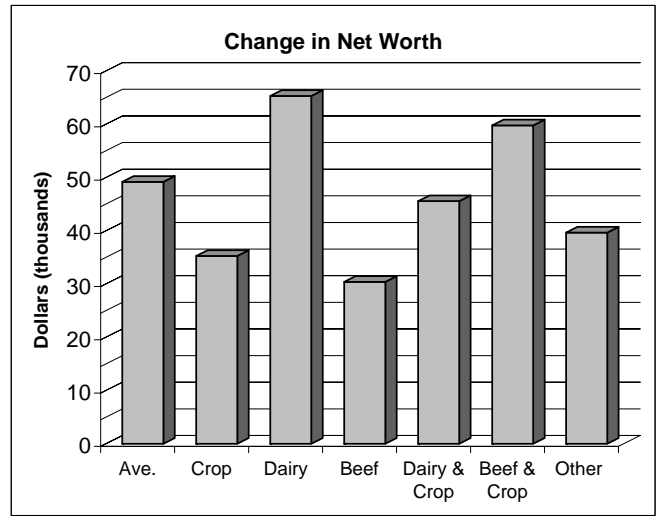
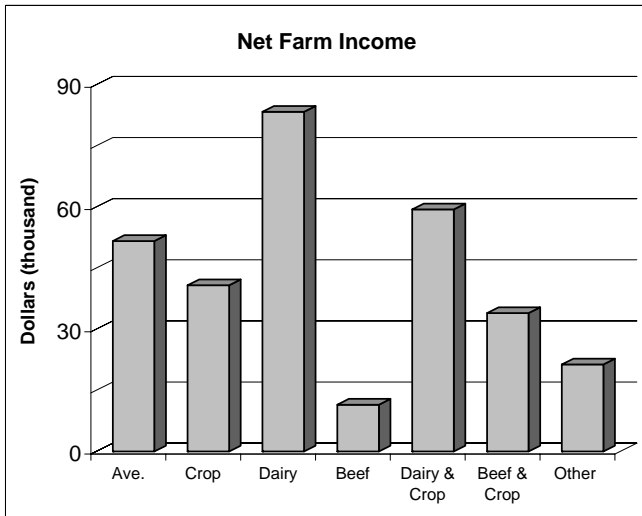
<b>Financial Summary Northland and Central Lakes Community &amp; Technical Colleges</b>												
<b>County Group Summary</b>												
	Average	Kitson Roseau Marshall	Pennington Polk Red Lake	Clay Mahnomen Norman Wilkin	Becker Douglas Otter Tail Wadena	Beltrami Clearwater Koochiching Lake of Woods	Aitkin, Cass Carlton Crow Wing Hubbard, Itasca St. Louis	Isanti Kanabec Mille Lacs, Pine Sherburne Washington	Benton Morrison Todd Stearns			
Number of Farms	417	38	65	50	70	41	16	53	80			
<b>Income Statement</b>												
Gross Cash Farm Income	306,049	315,513	392,016	303,076	257,130	167,641	249,458	198,435	434,727			
Total Cash Farm Expense	242,120	230,036	311,998	227,778	211,092	128,898	198,062	172,485	343,924			
Net Cash Farm Income	63,929	85,477	80,018	75,298	46,038	38,744	51,396	25,950	90,804			
Inventory Change	7,252	(19,905)	(17,984)	(7,063)	15,718	1,287	9,605	13,866	39,839			
Dep & Capital Adjustment	(19,524)	(21,514)	(20,498)	(15,116)	(21,645)	(15,007)	(16,980)	(17,617)	(23,010)			
Net Farm Income	51,656	44,058	41,536	53,119	40,110	25,024	44,021	22,198	107,633			
<b>Profitability (Cost)</b>												
Labor & Management Earnings	33,061	17,218	20,827	33,232	26,764	10,676	33,404	8,772	83,350			
Rate of Return on Assets	6.7%	3.8%	4.0%	6.3%	6.6%	2.7%	8.4%	2.9%	11.9%			
Rate of Return on Equity	8.0%	2.8%	3.0%	7.7%	8.5%	1.0%	13.6%	-1.5%	19.0%			
Operating Profit Margin	16.7%	10.8%	8.2%	15.4%	17.3%	8.1%	21.7%	8.9%	29.3%			
Asset Turnover Rate	39.9%	35.4%	48.8%	41.2%	38.1%	33.5%	39.0%	32.9%	40.5%			
<b>Liquidity</b>												
Ending current ratio	1.45	1.73	1.35	1.33	1.61	1.92	1.10	1.27	1.47			
Ending working capital	44,506	92,606	55,259	40,904	38,028	38,008	8,218	24,053	45,651			
End working capital to gross inc	14.5%	29.4%	14.1%	13.5%	14.8%	22.7%	3.3%	12.1%	10.5%			
Term Debt Coverage Ratio	151.5%	127.2%	100.6%	140.7%	167.7%	189.4%	147.2%	107.7%	195.7%			
Expense as a Percent of Income	77.2%	77.7%	83.6%	77.0%	77.0%	76.2%	76.4%	81.3%	72.3%			
Interest as a Percent of Income	5.9%	5.8%	4.8%	5.5%	5.9%	5.3%	6.5%	8.6%	6.0%			
<b>Solvency (Market)</b>												
Number of Farms	417	38	65	50	70	41	16	53	80			
Ending Farm Assets	800,022	918,004	816,924	804,703	649,438	546,982	581,964	731,593	1,090,252			
Ending Farm Liabilities	409,364	407,531	456,364	378,891	344,602	222,269	333,475	395,597	576,905			
Ending Total Assets	900,916	1,030,960	898,246	934,662	725,913	653,127	671,542	862,216	1,183,368			
Ending Total Liabilities	430,308	423,289	478,178	413,140	361,180	231,095	340,884	425,584	597,000			
Ending Net Worth	470,609	607,671	420,068	521,522	364,733	422,031	330,658	436,631	586,368			
Net Worth Change	49,186	45,999	26,151	63,563	32,258	34,229	67,891	22,063	98,629			
Ending Farm Debt to Asset Ratio	51%	44%	56%	47%	53%	41%	57%	54%	53%			
Beg Total Debt to Asset Ratio	50%	44%	54%	48%	50%	36%	58%	49%	54%			
End Total Debt to Asset Ratio	48%	41%	53%	44%	50%	35%	51%	49%	50%			
<b>Nonfarm Information</b>												
Net Nonfarm Income	20,120	19,815	18,488	23,575	14,735	25,941	20,140	23,616	18,757			
Farm Reporting Liv Expenses	103	-	6	17	24	6	-	18	27			
Total Family Living Expense	31,585	-	43,923	40,237	25,863	27,077	-	29,178	31,918			
Total Liv, Invest, & Cap Purch	45,188	-	58,559	57,547	34,344	38,590	-	38,452	51,491			
<b>Crop Acres</b>												
Total Acres Owned	401	888	512	453	243	524	240	237	273			
Total Crop Acres	720	1541	1409	988	375	433	410	410	337			
Total Crop Acres Owned	268	723	424	303	146	236	110	129	162			
Total Crop Acres Cash Rented	433	739	953	662	225	189	257	275	174			
Total Crop Acres Share Rent	19	80	31	23	3	9	44	6	1			

**Financial Summary**  
**Northland & Central Lakes Community and Technical Colleges**  
**(Farms Sorted By Farm Type)**

	<u>Avg. Of All Farms</u>	<u>Crop</u>	<u>Dairy</u>	<u>Beef</u>	<u>Crop and Dairy</u>	<u>Crop and Beef</u>	<u>Other</u>
Number of farms	417	98	163	41	15	19	78
<b>Income Statement</b>							
Gross cash farm income	306,049	367,141	361,258	95,003	366,715	269,950	188,904
Total cash farm expense	242,120	282,160	279,494	80,193	291,740	212,927	163,642
Net cash farm income	63,929	84,981	81,765	14,810	74,975	57,022	25,261
Inventory change	7,252	-22,745	23,824	4,670	16,945	304	10,000
Depreciation and capital adjust	-19,524	-21,447	-22,235	-7,995	-32,495	-23,354	-13,889
Net farm income	51,656	40,789	83,354	11,485	59,424	33,972	21,373
<b>Profitability (cost)</b>							
Labor and management earnings	33,061	18,175	64,106	-1,192	31,671	7,657	9,698
Rate of return on assets	6.7 %	3.7 %	10.7 %	0.8 %	5.8 %	3.2 %	3.6 %
Rate of return on equity	8.0 %	2.3 %	16.8 %	-2.1 %	6.2 %	1.9 %	0.5 %
Operating profit margin	16.7 %	8.1 %	26.1 %	3.7 %	16.8 %	10.7 %	10.0 %
Asset turnover rate	39.9 %	46.0 %	41.0 %	21.9 %	34.4 %	29.7 %	36.2 %
<b>Liquidity</b>							
Ending current ratio	1.45	1.38	1.51	1.86	1.53	1.54	1.39
Ending working capital	44,506	62,955	35,594	32,840	68,159	71,766	34,013
End working capital to gross inc	14.5 %	17.1 %	9.9 %	34.6 %	18.6 %	26.6 %	18.0 %
Term debt coverage ratio	151.5 %	100.9 %	188.2 %	178.7 %	144.9 %	134.1 %	117.8 %
Expense as a percent of income	77.2 %	81.9 %	72.4 %	80.3 %	75.8 %	79.3 %	82.4 %
Interest as a percent of income	5.9 %	5.5 %	5.6 %	7.3 %	6.4 %	6.0 %	7.9 %
<b>Solvency (market)</b>							
Number of farms	417	98	163	41	15	19	78
Ending farm assets	800,022	897,400	841,408	452,611	1,176,706	1,054,304	619,512
Ending farm liabilities	409,364	462,922	441,049	167,934	571,514	468,427	335,538
Ending total assets	900,916	1,039,875	926,510	552,241	1,286,369	1,092,106	713,965
Ending total liabilities	430,308	492,749	458,397	187,253	579,601	469,583	359,294
Ending net worth	470,609	547,126	468,113	364,988	706,767	622,523	354,671
Net worth change	49,186	35,278	65,318	30,396	45,564	59,793	39,651
Ending farm debt to asset ratio	51 %	52 %	52 %	37 %	49 %	44 %	54 %
Beg total debt to asset ratio	50 %	49 %	53 %	35 %	45 %	44 %	52 %
End total debt to asset ratio	48 %	47 %	49 %	34 %	45 %	43 %	50 %
<b>Nonfarm Information</b>							
Net nonfarm income	20,120	19,151	12,685	40,681	17,734	18,644	26,956
Farms reporting living expenses	103	25	47	8	5	3	15
Total family living expense	31,585	36,518	29,965	35,133	41,485	-	24,576
Total living, invest, & capital	45,188	52,268	46,593	47,262	43,163	-	31,536
<b>Crop Acres</b>							
Total acres owned	401	601	254	394	510	838	338
Total crop acres	720	1,587	283	287	897	991	673
Total crop acres owned	268	500	136	156	472	509	214
Total crop acres cash rented	433	1,051	146	121	373	468	425
Total crop acres share rented	19	36	1	10	52	14	34



## Selected Factors by Type of Farm



**Financial Summary**  
**Northland & Central Lakes Community and Technical Colleges**  
**(Farms Sorted By Gross Farm Income)**

	<u>Less than 50,000</u>	<u>50,001 - 100,000</u>	<u>100,001 - 250,000</u>	<u>250,001 - 500,000</u>	<u>500,001 - 1,000,000</u>	<u>Over 1,000,000</u>
Number of farms	46	63	140	107	44	17
<b>Income Statement</b>						
Gross cash farm income	27,199	74,557	176,029	350,988	647,996	1,821,321
Total cash farm expense	36,331	64,872	139,373	269,554	501,822	1,457,136
Net cash farm income	-9,132	9,685	36,657	81,434	146,174	364,185
Inventory change	4,286	5,265	8,984	8,865	-16,069	58,572
Depreciation and capital adjust	-6,411	-7,017	-11,274	-24,699	-36,073	-93,900
Net farm income	-11,257	7,933	34,367	65,599	94,033	328,857
<b>Profitability (cost)</b>						
Labor and management earnings	-17,071	-1,343	20,500	45,730	59,119	252,461
Rate of return on assets	-7.3 %	0.1 %	5.5 %	7.8 %	6.8 %	11.4 %
Rate of return on equity	-22.6 %	-5.0 %	5.4 %	10.8 %	8.6 %	18.3 %
Operating profit margin	-56.4 %	0.3 %	15.2 %	19.5 %	14.8 %	23.2 %
Asset turnover rate	13.0 %	22.9 %	35.9 %	40.3 %	46.2 %	49.2 %
<b>Liquidity</b>						
Ending current ratio	1.39	1.47	1.59	1.40	1.40	1.43
Ending working capital	9,130	15,242	35,102	47,521	93,920	179,241
End working capital to gross inc	33.6 %	20.4 %	19.9 %	13.5 %	14.5 %	9.8 %
Term debt coverage ratio	100.8 %	113.1 %	148.3 %	149.5 %	123.9 %	218.7 %
Expense as a percent of income	115.5 %	81.6 %	75.3 %	74.9 %	79.5 %	77.3 %
Interest as a percent of income	19.5 %	9.6 %	6.1 %	6.0 %	5.3 %	4.8 %
<b>Solvency (market)</b>						
Number of farms	46	63	140	107	44	17
Ending farm assets	282,231	396,374	578,256	894,757	1,442,326	3,264,578
Ending farm liabilities	140,073	179,866	263,070	478,989	764,984	1,834,661
Ending total assets	379,519	480,676	671,283	1,007,708	1,565,197	3,368,744
Ending total liabilities	165,448	197,860	279,332	504,564	783,996	1,868,926
Ending net worth	214,071	282,815	391,951	503,144	781,201	1,499,817
Net worth change	10,609	21,953	30,047	55,099	77,420	301,811
Ending farm debt to asset ratio	50 %	45 %	45 %	54 %	53 %	56 %
Beg total debt to asset ratio	42 %	42 %	41 %	53 %	53 %	61 %
End total debt to asset ratio	44 %	41 %	42 %	50 %	50 %	55 %
<b>Nonfarm Information</b>						
Net nonfarm income	41,404	28,961	18,397	12,771	12,443	10,086
Farms reporting living expenses	14	11	42	26	8	2
Total family living expense	30,896	22,531	28,910	34,134	45,516	-
Total living, invest, & capital	42,453	34,692	40,700	46,466	60,673	-
<b>Crop Acres</b>						
Total acres owned	252	313	319	430	731	778
Total crop acres	213	274	478	875	1,782	2,021
Total crop acres owned	101	141	201	339	538	602
Total crop acres cash rented	101	126	263	507	1,203	1,410
Total crop acres share rented	11	7	14	29	40	8

**Financial Summary**  
**Northland & Central Lakes Community and Technical Colleges**  
**(Farms Sorted By Total Crop Acres)**

	<u>Less than 100</u>	<u>101 - 250</u>	<u>251 - 500</u>	<u>501 - 1,000</u>	<u>1,001 - 1,500</u>	<u>1,501 - 2,000</u>	<u>2,001 - 5,000</u>
Number of farms	55	87	110	67	39	23	34
<b>Income Statement</b>							
Gross cash farm income	162,468	140,249	223,061	317,267	579,412	658,513	605,472
Total cash farm expense	131,303	113,116	173,040	250,778	487,506	504,757	461,957
Net cash farm income	31,166	27,133	50,021	66,489	91,906	153,755	143,515
Inventory change	3,705	10,052	14,213	9,706	29,847	3,824	-42,967
Depreciation and capital adjust	-9,031	-10,752	-17,196	-23,830	-24,115	-42,098	-35,533
Net farm income	25,839	26,433	47,038	52,365	97,637	115,481	65,015
<b>Profitability (cost)</b>							
Labor and management earnings	18,682	15,382	31,049	31,845	68,312	84,265	29,109
Rate of return on assets	5.4 %	5.1 %	7.1 %	6.1 %	8.8 %	9.7 %	4.0 %
Rate of return on equity	6.3 %	4.7 %	8.8 %	6.6 %	12.2 %	15.5 %	3.0 %
Operating profit margin	15.0 %	17.2 %	21.1 %	16.5 %	18.0 %	21.5 %	8.2 %
Asset turnover rate	36.1 %	29.6 %	33.5 %	37.3 %	48.7 %	44.9 %	48.2 %
<b>Liquidity</b>							
Ending current ratio	1.09	1.71	1.58	1.54	1.26	1.32	1.39
Ending working capital	3,826	22,505	34,995	57,515	53,714	73,562	105,375
End working capital to gross inc	2.4 %	16.0 %	15.7 %	18.1 %	9.3 %	11.2 %	17.4 %
Term debt coverage ratio	128.1 %	164.5 %	146.8 %	164.5 %	179.9 %	174.0 %	95.0 %
Expense as a percent of income	79.1 %	75.0 %	72.9 %	76.7 %	80.0 %	76.2 %	82.3 %
Interest as a percent of income	6.3 %	6.3 %	6.5 %	6.5 %	5.0 %	6.2 %	4.9 %
<b>Solvency (market)</b>							
Number of farms	55	87	110	67	39	23	34
Ending farm assets	412,647	472,394	688,043	877,960	1,238,822	1,557,580	1,379,439
Ending farm liabilities	244,939	210,954	337,412	443,202	674,219	878,639	713,208
Ending total assets	476,710	570,441	787,941	973,516	1,354,910	1,729,526	1,495,084
Ending total liabilities	267,995	227,658	357,094	457,092	706,789	920,211	733,566
Ending net worth	208,715	342,784	430,847	516,424	648,121	809,315	761,519
Net worth change	42,000	27,605	37,824	46,877	83,506	117,939	68,079
Ending farm debt to asset ratio	59 %	45 %	49 %	50 %	54 %	56 %	52 %
Beg total debt to asset ratio	60 %	41 %	47 %	49 %	54 %	58 %	52 %
End total debt to asset ratio	56 %	40 %	45 %	47 %	52 %	53 %	49 %
<b>Nonfarm Information</b>							
Net nonfarm income	19,078	27,956	19,338	20,451	16,266	15,868	12,115
Farms reporting living expenses	8	32	30	13	16	-	4
Total family living expense	25,182	31,866	29,330	26,159	39,914	-	-
Total living, invest, & capital	33,066	45,068	44,718	29,524	58,939	-	-
<b>Crop Acres</b>							
Total acres owned	140	227	318	516	455	702	987
Total crop acres	35	181	359	733	1,240	1,747	2,751
Total crop acres owned	22	103	185	304	396	624	837
Total crop acres cash rented	12	78	164	414	819	1,064	1,820
Total crop acres share rented	1	1	10	14	25	60	94

---

## ***Individual Enterprise Analysis Tables***

---

The individual crop and livestock tables are designed to identify the costs and returns for specific enterprises on the farm. Data from all farmers with each enterprise is merged. The minimum number of farms, in order to print a given column on the following reports, is five (5). This enables the necessary level of confidentiality for publication of this information.

The crop reports list acres, yield, value per unit, (usually the sales price or an assigned market value) and the gross return per acre. The price includes cash price plus any Loan Deficiency Payment (LDP). Miscellaneous income would include crop insurance payment or crop specific government payment.

Costs such as fertilizer, chemicals, seed, crop drying expenses, hired labor, and custom hire are costs that are assigned to each individual crop. These costs are shown in the crop enterprise analysis as *Direct Costs*.

Other costs, called *Overhead Costs*, are divided out by formula. Overhead costs are assigned by an allocation factor to each enterprise. The allocation factor is based on historical data of labor and capital intensity.

There are a couple of subtle differences between the Owned Land and Cash Rented Land tables. Naturally, on cash rented land, the actual cost of renting the land is reported in the direct cost section. On the owned land, the land cost consists of three different lines of information in the overhead cost section. The two costs that would be included for owned land are: real-estate taxes, and interest on long-term debt.

The Labor and Management Charge is calculated by taking five (5) percent of the gross farm revenue and a per operator charge of \$15,000.

Government Payments near the bottom of the page include Direct and Counter Cyclical payments. They are spread across all tillable acres except edible beans, potatoes and other vegetable crops.

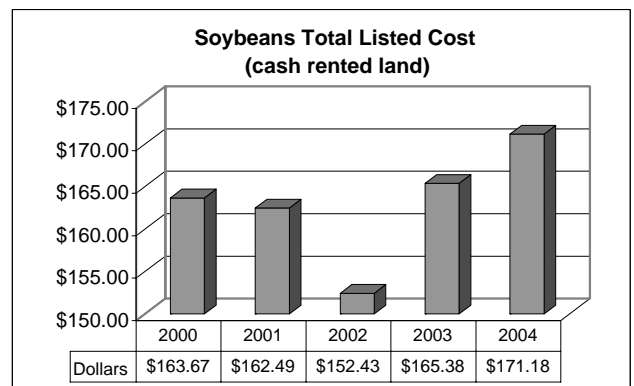
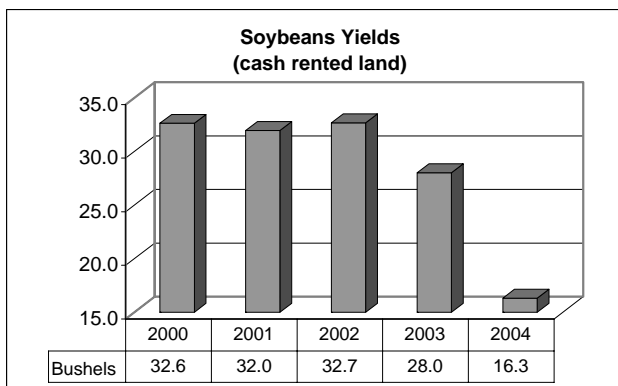
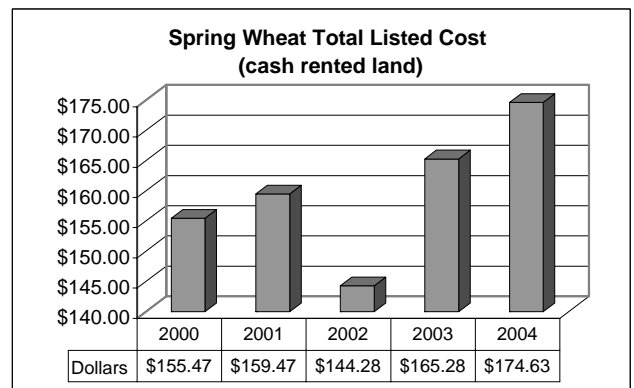
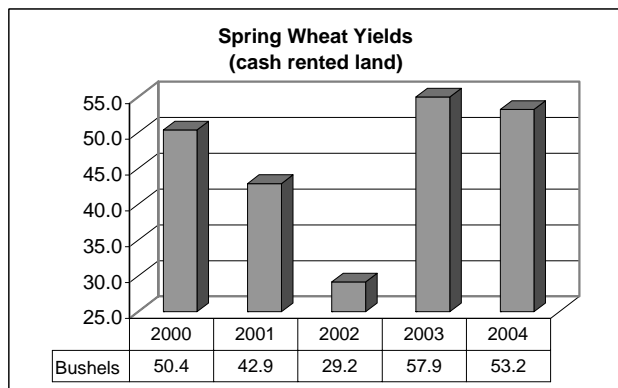
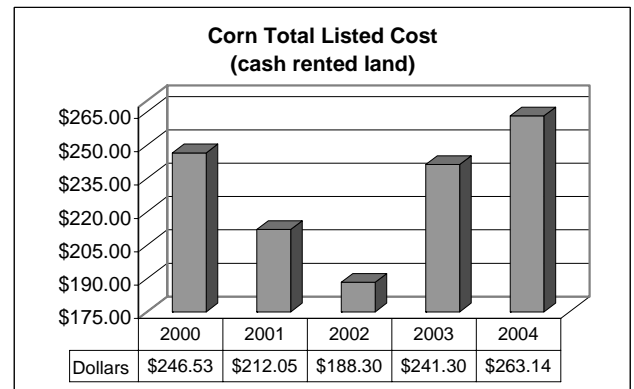
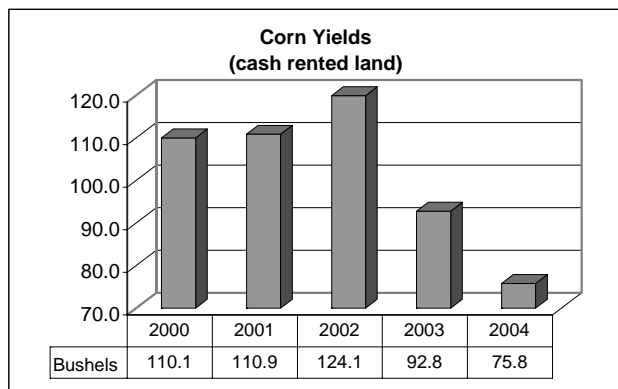
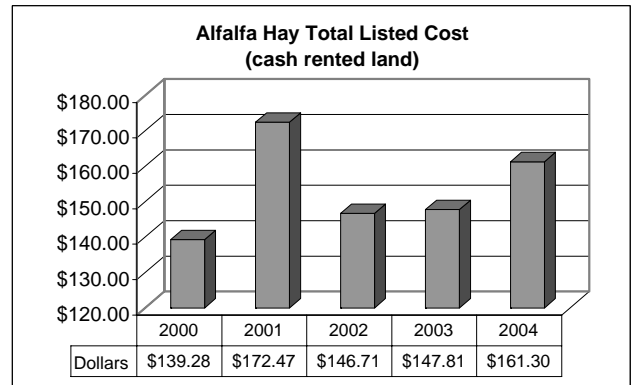
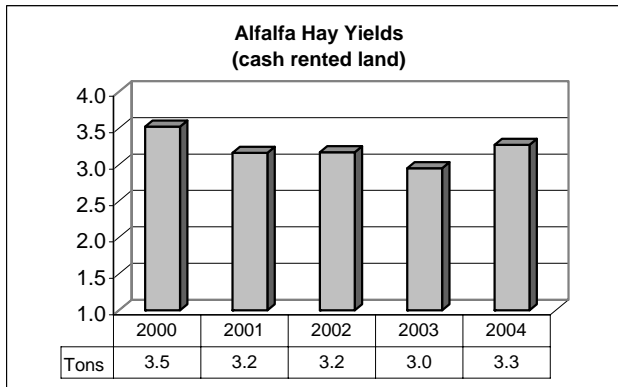
The livestock reports have a format similar to the crop reports. Production information is listed at the top of each table. This will include animal or product sales, purchases, sales, transfers, and inventory change.

The *Direct Costs* include costs that are assigned to the enterprise, including items such as: feed, veterinary, breeding, marketing, hired labor, fuel & repairs, and livestock supplies. The *Overhead Costs* include formula-assigned costs, including items such as: depreciation, interest, utilities, and insurances.

At the bottom of each livestock report, there is a list of selected factors for each enterprise. These factors are a combination of production indicators and efficiency indicators.

Towards the bottom of both the crop and livestock enterprise tables, are four (4) factors that show varying levels of Cost of Production. Those factors include a cost of production based on: direct costs, overhead & direct costs, total cost including labor & management, and total cost less government payments and/or other revenue.

## Five Year History of Crop Yields and Cost of Production



**Crop Enterprise Analysis**  
**Northland & Central Lakes Community and Technical Colleges**  
**(Farms Sorted By Return to Overhead)**

**Corn on Owned Land**

	<u>Avg. Of All Farms</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of fields	126	25	29
Number of farms	116	23	24
Acres	80.00	78.98	82.27
Yield per acre (bu.)	82.62	86.48	110.13
Operators share of yield %	100.00	100.00	100.00
Value per bu.	2.03	1.98	2.19
Total product return per acre	167.40	171.12	240.84
Miscellaneous income per acre	63.64	37.95	66.06
Gross return per acre	231.05	209.06	306.90
<b>Direct Expenses</b>			
Seed	35.01	35.09	37.20
Fertilizer	45.36	42.33	43.26
Crop chemicals	23.47	25.02	20.15
Crop insurance	9.30	9.33	9.58
Drying fuel	9.63	12.55	11.49
Fuel & oil	16.46	15.73	17.58
Repairs	27.38	23.12	26.74
Custom hire	2.04	1.87	1.92
Machinery & bldg leases	0.22	1.11	-
Operating interest	5.41	3.25	5.35
Miscellaneous	1.31	1.65	0.80
Total direct expenses per acre	175.59	171.05	174.08
Return over direct exp per acre	55.46	38.01	132.82
<b>Overhead Expenses</b>			
Custom hire	4.98	3.69	4.63
Hired labor	9.53	4.28	8.75
Machinery & bldg leases	2.35	2.49	2.27
RE & pers. property taxes	6.44	4.70	6.01
Farm insurance	3.39	2.64	4.13
Utilities	2.73	1.78	3.54
Dues & professional fees	1.64	0.84	3.10
Interest	33.45	33.09	33.49
Mach & bldg depreciation	23.45	17.42	27.51
Miscellaneous	4.68	2.55	4.94
Total overhead expenses per acre	92.63	73.48	98.36
Total dir & ovhd expenses per acre	268.22	244.53	272.45
Net return per acre	-37.17	-35.46	34.45
Lbr & mgt charge per acre	27.88	29.43	26.52
Net return over lbr & mgt	-65.05	-64.89	7.93
Government payments	15.01	11.66	15.04
Net return with govt payments	-50.04	-53.23	22.98
<b>Cost of Production</b>			
Total direct expense per bu.	2.13	1.98	1.58
Total dir & ovhd exp per bu.	3.25	2.83	2.47
With labor & management	3.58	3.17	2.71
Total exp less govt & oth income	2.63	2.59	1.98
Est. labor hours per acre	4.37	5.05	3.78

**Crop Enterprise Analysis**  
**Northland & Central Lakes Community and Technical Colleges**  
**(Farms Sorted By Return to Overhead)**

**Corn on Cash Rent**

	<u>Avg. Of All Farms</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of fields	157	30	41
Number of farms	129	26	26
Acres	120.59	156.95	87.60
Yield per acre (bu.)	75.82	68.68	72.58
Operators share of yield %	100.00	100.00	100.00
Value per bu.	2.03	2.09	2.13
Total product return per acre	153.83	143.40	154.51
Miscellaneous income per acre	66.69	67.08	122.87
Gross return per acre	220.52	210.48	277.38
<b>Direct Expenses</b>			
Seed	34.83	34.87	33.31
Fertilizer	44.19	44.59	35.86
Crop chemicals	23.59	23.23	20.46
Crop insurance	11.35	9.15	15.40
Drying fuel	10.76	10.49	7.45
Fuel & oil	15.06	14.55	12.21
Repairs	22.86	18.18	23.31
Custom hire	1.95	2.33	1.51
Hired labor	0.50	0.99	1.24
Land rent	39.05	41.21	43.16
Machinery & bldg leases	0.39	1.33	-
Operating interest	4.66	3.96	4.34
Miscellaneous	1.44	0.49	1.36
Total direct expenses per acre	210.64	205.39	199.61
Return over direct exp per acre	9.88	5.09	77.77
<b>Overhead Expenses</b>			
Custom hire	5.41	3.62	1.56
Hired labor	7.35	4.60	3.98
Machinery & bldg leases	3.69	4.08	4.40
Farm insurance	3.00	2.50	3.43
Utilities	2.44	1.38	2.31
Dues & professional fees	1.14	0.92	1.85
Interest	7.28	5.01	6.60
Mach & bldg depreciation	19.04	13.09	18.07
Miscellaneous	3.15	3.91	2.45
Total overhead expenses per acre	52.50	39.11	44.63
Total dir & ovhd expenses per acre	263.14	244.50	244.24
Net return per acre	-42.62	-34.02	33.13
Lbr & mgt charge per acre	23.63	19.26	26.29
Net return over lbr & mgt	-66.25	-53.27	6.84
Government payments	15.36	14.34	14.79
Net return with govt payments	-50.89	-38.93	21.63
<b>Cost of Production</b>			
Total direct expense per bu.	2.78	2.99	2.75
Total dir & ovhd exp per bu.	3.47	3.56	3.37
With labor & management	3.78	3.84	3.73
Total exp less govt & oth income	2.70	2.65	1.83
Est. labor hours per acre	3.66	2.70	3.55

**Crop Enterprise Analysis**  
**Northland & Central Lakes Community and Technical Colleges**  
**(Farms Sorted By Return to Overhead)**

**Corn Silage on Owned Land**

	<u>Avg. Of All Farms</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of fields	150	29	32
Number of farms	144	29	29
Acres	48.99	50.23	52.43
Yield per acre (ton)	13.27	12.98	19.62
Operators share of yield %	100.00	100.00	100.00
Value per ton	19.47	18.70	20.32
Total product return per acre	258.30	242.73	398.66
Miscellaneous income per acre	32.69	29.19	29.64
Gross return per acre	290.99	271.92	428.30
<b>Direct Expenses</b>			
Seed	30.75	29.68	32.43
Fertilizer	32.69	30.82	32.64
Crop chemicals	22.12	24.34	21.11
Crop insurance	6.25	6.01	6.99
Fuel & oil	20.82	18.45	22.87
Repairs	33.16	33.61	34.61
Custom hire	5.36	5.89	4.78
Operating interest	3.07	4.96	2.52
Miscellaneous	4.21	0.98	6.56
Total direct expenses per acre	158.44	154.73	164.51
Return over direct exp per acre	132.55	117.19	263.79
<b>Overhead Expenses</b>			
Custom hire	9.49	4.94	19.61
Hired labor	12.99	11.03	20.27
Machinery & bldg leases	4.21	5.85	5.96
RE & pers. property taxes	4.47	4.43	3.66
Farm insurance	3.87	4.00	4.27
Utilities	2.49	2.71	2.15
Dues & professional fees	1.54	1.31	2.79
Interest	30.71	30.26	36.94
Mach & bldg depreciation	23.64	27.39	20.43
Miscellaneous	3.68	5.33	3.03
Total overhead expenses per acre	97.10	97.25	119.11
Total dir & ovhd expenses per acre	255.54	251.98	283.62
Net return per acre	35.45	19.93	144.67
Lbr & mgt charge per acre	26.98	27.25	23.99
Net return over lbr & mgt	8.47	-7.31	120.68
Government payments	11.09	14.04	11.94
Net return with govt payments	19.56	6.73	132.62
<b>Cost of Production</b>			
Total direct expense per ton	11.94	11.92	8.39
Total dir & ovhd exp per ton	19.26	19.41	14.46
With labor & management	21.29	21.51	15.68
Total exp less govt & oth income	17.99	18.18	13.56
Est. labor hours per acre	5.45	4.18	6.58



**Crop Enterprise Analysis**  
**Northland & Central Lakes Community and Technical Colleges**  
**(Farms Sorted By Return to Overhead)**

**Corn Silage on Cash Rent**

	<u>Avg. Of All Farms</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of fields	113	23	24
Number of farms	106	21	22
Acres	66.10	51.96	95.03
Yield per acre (ton)	14.08	11.63	18.94
Operators share of yield %	100.00	100.00	100.00
Value per ton	19.62	18.53	20.96
Total product return per acre	276.10	215.46	396.93
Miscellaneous income per acre	31.94	41.14	49.30
Gross return per acre	308.04	256.61	446.23
<b>Direct Expenses</b>			
Seed	32.82	28.22	38.97
Fertilizer	33.47	32.44	35.39
Crop chemicals	24.94	23.89	23.66
Crop insurance	6.94	8.43	7.15
Fuel & oil	21.30	19.84	21.95
Repairs	31.42	25.39	29.40
Custom hire	6.63	1.47	3.53
Land rent	28.60	27.99	35.29
Operating interest	4.05	3.42	4.81
Miscellaneous	3.63	2.66	2.30
Total direct expenses per acre	193.79	173.76	202.45
Return over direct exp per acre	114.25	82.85	243.78
<b>Overhead Expenses</b>			
Custom hire	10.54	3.17	17.22
Hired labor	14.42	10.44	13.91
Machinery & bldg leases	6.14	7.82	10.12
Farm insurance	3.39	3.69	3.68
Utilities	2.61	2.44	2.45
Dues & professional fees	0.60	0.71	0.15
Interest	8.87	7.36	8.36
Mach & bldg depreciation	21.87	20.66	22.96
Miscellaneous	2.59	2.25	1.54
Total overhead expenses per acre	71.02	58.55	80.38
Total dir & ovhd expenses per acre	264.82	232.31	282.84
Net return per acre	43.22	24.30	163.40
Lbr & mgt charge per acre	28.17	24.77	27.82
Net return over lbr & mgt	15.05	-0.47	135.58
Government payments	11.46	12.08	13.26
Net return with govt payments	26.51	11.61	148.84
<b>Cost of Production</b>			
Total direct expense per ton	13.77	14.95	10.69
Total dir & ovhd exp per ton	18.81	19.98	14.94
With labor & management	20.82	22.11	16.41
Total exp less govt & oth income	17.73	17.53	13.10
Est. labor hours per acre	6.22	4.17	6.78

**Crop Enterprise Analysis**  
**Northland & Central Lakes Community and Technical Colleges**  
**(Farms Sorted By Return to Overhead)**

**Hay, Alfalfa on Owned Land**

	<u>Avg. Of All Farms</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of fields	113	21	21
Number of farms	102	21	21
Acres	53.88	85.31	49.99
Yield per acre (ton)	3.52	3.20	4.85
Operators share of yield %	100.00	100.00	100.00
Value per ton	74.49	78.27	88.29
Total product return per acre	262.38	250.82	427.84
Miscellaneous income per acre	4.52	8.69	-
Gross return per acre	266.90	259.50	427.84
<b>Direct Expenses</b>			
Fertilizer	17.86	13.93	10.76
Crop chemicals	1.50	2.32	4.21
Crop insurance	2.15	3.51	0.59
Fuel & oil	20.09	17.10	23.11
Repairs	30.90	29.91	32.94
Custom hire	3.95	4.08	3.78
Operating interest	2.99	3.08	1.14
Miscellaneous	4.02	3.06	5.82
Total direct expenses per acre	83.46	76.98	82.35
Return over direct exp per acre	183.44	182.52	345.48
<b>Overhead Expenses</b>			
Custom hire	5.47	3.17	7.65
Hired labor	9.33	5.68	15.48
Machinery & bldg leases	4.98	7.54	6.58
RE & pers. property taxes	5.56	5.86	4.17
Farm insurance	4.18	4.91	2.83
Utilities	3.08	3.04	2.61
Dues & professional fees	1.41	0.80	0.71
Interest	28.39	24.65	34.07
Mach & bldg depreciation	23.82	21.23	27.77
Miscellaneous	3.27	3.06	2.25
Total overhead expenses per acre	89.49	79.95	104.12
Total dir & ovhd expenses per acre	172.95	156.93	186.47
Net return per acre	93.95	102.57	241.37
Lbr & mgt charge per acre	27.87	25.90	26.44
Net return over lbr & mgt	66.08	76.67	214.93
Government payments	12.19	13.30	11.94
Net return with govt payments	78.27	89.97	226.87
<b>Cost of Production</b>			
Total direct expense per ton	23.69	24.02	17.00
Total dir & ovhd exp per ton	49.10	48.97	38.48
With labor & management	57.01	57.06	43.94
Total exp less govt & oth income	52.27	50.19	41.47
Est. labor hours per acre	4.71	3.68	6.47

**Crop Enterprise Analysis**  
**Northland & Central Lakes Community and Technical Colleges**  
**(Farms Sorted By Return to Overhead)**

**Hay, Alfalfa on Cash Rent**

	<u>Avg. Of All Farms</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of fields	101	19	19
Number of farms	93	18	19
Acres	61.94	59.15	51.10
Yield per acre (ton)	3.27	3.09	4.49
Operators share of yield %	100.00	100.00	100.00
Value per ton	69.78	75.76	87.07
Total product return per acre	228.48	234.47	390.80
Miscellaneous income per acre	2.09	8.84	-
Gross return per acre	230.58	243.31	390.80
<b>Direct Expenses</b>			
Fertilizer	13.96	10.68	10.53
Crop chemicals	1.56	1.98	3.93
Crop insurance	1.38	2.94	2.31
Fuel & oil	16.72	15.18	19.47
Repairs	27.71	27.08	26.98
Custom hire	6.66	1.55	7.52
Land rent	31.64	39.38	32.88
Operating interest	3.70	4.20	2.46
Miscellaneous	2.03	2.01	4.97
Total direct expenses per acre	105.35	105.00	111.06
Return over direct exp per acre	125.22	138.31	279.74
<b>Overhead Expenses</b>			
Custom hire	5.33	3.45	9.35
Hired labor	7.02	5.54	14.54
Machinery & bldg leases	4.60	1.83	8.81
Farm insurance	3.97	5.92	3.19
Utilities	2.96	2.69	2.01
Dues & professional fees	1.17	0.85	0.28
Interest	7.35	8.30	10.56
Mach & bldg depreciation	20.99	22.24	26.65
Miscellaneous	2.55	4.37	1.52
Total overhead expenses per acre	55.94	55.19	76.91
Total dir & ovhd expenses per acre	161.30	160.19	187.97
Net return per acre	69.28	83.12	202.84
Lbr & mgt charge per acre	24.88	29.07	26.02
Net return over lbr & mgt	44.40	54.05	176.81
Government payments	12.13	16.25	12.52
Net return with govt payments	56.53	70.30	189.33
<b>Cost of Production</b>			
Total direct expense per ton	32.18	33.93	24.74
Total dir & ovhd exp per ton	49.26	51.76	41.88
With labor & management	56.86	61.15	47.67
Total exp less govt & oth income	52.52	53.05	44.89
Est. labor hours per acre	4.04	3.59	6.10

**Crop Enterprise Analysis**  
**Northland & Central Lakes Community and Technical Colleges**  
**(Farms Sorted By Return to Overhead)**

**Hay, Mixed on Owned Land**

	<u>Avg. Of All Farms</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of fields	74	13	14
Number of farms	66	13	14
Acres	95.41	86.66	72.41
Yield per acre (ton)	2.28	2.36	3.20
Operators share of yield %	100.00	100.00	100.00
Value per ton	51.17	46.61	62.94
Total product return per acre	116.41	109.90	201.25
Miscellaneous income per acre	2.33	2.86	9.35
Gross return per acre	118.74	112.76	210.60
<b>Direct Expenses</b>			
Seed	0.24	0.82	0.60
Fertilizer	17.61	14.85	17.55
Crop insurance	0.97	1.27	0.83
Fuel & oil	11.33	8.17	13.30
Repairs	19.03	17.44	19.73
Custom hire	0.76	0.56	1.48
Operating interest	2.22	2.65	1.80
Miscellaneous	4.08	2.95	4.65
Total direct expenses per acre	56.23	48.72	59.94
Return over direct exp per acre	62.51	64.04	150.66
<b>Overhead Expenses</b>			
Custom hire	3.32	1.87	5.80
Hired labor	4.29	1.68	8.13
Machinery & bldg leases	0.53	0.36	0.86
RE & pers. property taxes	4.60	5.36	6.56
Farm insurance	2.31	1.39	2.66
Utilities	1.72	1.88	2.57
Interest	11.28	9.18	24.24
Mach & bldg depreciation	16.43	15.43	29.36
Miscellaneous	3.40	2.38	3.70
Total overhead expenses per acre	47.88	39.52	83.88
Total dir & ovhd expenses per acre	104.11	88.24	143.83
Net return per acre	14.63	24.52	66.77
Lbr & mgt charge per acre	20.21	21.40	25.49
Net return over lbr & mgt	-5.58	3.13	41.28
Government payments	5.55	6.30	9.05
Net return with govt payments	-0.03	9.43	50.33
<b>Cost of Production</b>			
Total direct expense per ton	24.72	20.66	18.75
Total dir & ovhd exp per ton	45.76	37.42	44.98
With labor & management	54.64	46.50	52.95
Total exp less govt & oth income	51.18	42.62	47.20
Est. labor hours per acre	2.92	2.71	3.76

**Crop Enterprise Analysis**  
**Northland & Central Lakes Community and Technical Colleges**  
**(Farms Sorted By Return to Overhead)**

**Hay, Mixed on Cash Rent**

	<u>Avg. Of All Farms</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of fields	60	11	12
Number of farms	56	11	12
Acres	103.17	118.65	150.12
Yield per acre (ton)	2.24	2.18	2.81
Operators share of yield %	100.00	100.00	100.00
Value per ton	58.91	52.69	68.46
Total product return per acre	132.24	114.64	192.59
Miscellaneous income per acre	1.53	0.27	3.24
Gross return per acre	133.78	114.91	195.83
<b>Direct Expenses</b>			
Seed	0.91	2.15	0.32
Fertilizer	14.08	11.49	12.17
Crop insurance	1.04	1.34	1.10
Fuel & oil	11.38	10.31	12.70
Repairs	18.94	18.04	24.10
Custom hire	1.91	0.13	0.37
Land rent	14.81	17.74	12.59
Machinery & bldg leases	0.61	-	1.87
Operating interest	1.89	2.74	0.99
Miscellaneous	2.46	2.25	1.15
Total direct expenses per acre	68.03	66.19	67.34
Return over direct exp per acre	65.74	48.72	128.49
<b>Overhead Expenses</b>			
Custom hire	2.63	2.51	4.83
Hired labor	5.61	5.77	11.21
Machinery & bldg leases	0.92	1.11	1.76
Farm insurance	2.07	2.34	2.15
Utilities	1.62	1.70	1.91
Interest	3.97	2.53	5.18
Mach & bldg depreciation	14.33	10.87	15.34
Miscellaneous	2.94	2.79	2.56
Total overhead expenses per acre	34.07	29.62	44.94
Total dir & ovhd expenses per acre	102.10	95.81	112.28
Net return per acre	31.67	19.10	83.55
Lbr & mgt charge per acre	19.50	21.12	17.99
Net return over lbr & mgt	12.17	-2.02	65.56
Government payments	7.07	9.06	7.98
Net return with govt payments	19.24	7.04	73.54
<b>Cost of Production</b>			
Total direct expense per ton	30.31	30.42	23.94
Total dir & ovhd exp per ton	45.48	44.04	39.91
With labor & management	54.17	53.74	46.31
Total exp less govt & oth income	50.34	49.46	42.32
Est. labor hours per acre	3.33	3.27	4.04

**Crop Enterprise Analysis**  
**Northland & Central Lakes Community and Technical Colleges**  
**(Farms Sorted By Return to Overhead)**

**Hay, Grass on Owned Land**

	<u>Avg. Of All Farms</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of fields	51	9	11
Number of farms	48	9	10
Acres	24.04	34.22	13.42
Yield per acre (ton)	2.06	1.92	3.05
Operators share of yield %	100.00	100.00	100.00
Value per ton	47.03	46.32	53.72
Total product return per acre	96.71	89.09	163.91
Miscellaneous income per acre	-	-	-
Gross return per acre	96.71	89.09	163.91
<b>Direct Expenses</b>			
Fertilizer	4.45	3.53	2.47
Fuel & oil	10.07	10.18	11.09
Repairs	17.09	18.50	21.59
Custom hire	3.48	5.29	2.61
Operating interest	1.00	0.85	1.76
Miscellaneous	1.79	1.26	0.45
Total direct expenses per acre	37.88	39.61	39.96
Return over direct exp per acre	58.83	49.48	123.95
<b>Overhead Expenses</b>			
Custom hire	2.09	0.48	4.01
Hired labor	6.03	4.88	3.27
Machinery & bldg leases	1.50	1.05	3.78
RE & pers. property taxes	4.52	5.93	4.24
Farm insurance	2.05	1.19	2.05
Utilities	1.01	0.79	1.18
Interest	14.89	12.29	38.50
Mach & bldg depreciation	12.80	12.66	12.43
Miscellaneous	1.34	2.12	1.21
Total overhead expenses per acre	46.23	41.40	70.68
Total dir & ovhd expenses per acre	84.11	81.01	110.64
Net return per acre	12.60	8.08	53.27
Lbr & mgt charge per acre	14.47	16.66	20.09
Net return over lbr & mgt	-1.87	-8.58	33.18
Government payments	4.81	5.01	9.21
Net return with govt payments	2.94	-3.57	42.39
<b>Cost of Production</b>			
Total direct expense per ton	18.42	20.59	13.10
Total dir & ovhd exp per ton	40.90	42.11	36.26
With labor & management	47.94	50.78	42.85
Total exp less govt & oth income	45.60	48.17	39.83
Est. labor hours per acre	3.09	3.71	3.94

**Crop Enterprise Analysis**  
**Northland & Central Lakes Community and Technical Colleges**  
**(Farms Sorted By Return to Overhead)**

**Hay, Grass on Cash Rent**

	<u>Avg. Of All Farms</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of fields	59	11	12
Number of farms	51	10	11
Acres	71.00	92.82	122.50
Yield per acre (ton)	1.54	1.36	2.08
Operators share of yield %	100.00	100.00	100.00
Value per ton	50.39	45.47	53.53
Total product return per acre	77.47	61.67	111.38
Miscellaneous income per acre	-	-	-
Gross return per acre	77.47	61.67	111.38
<b>Direct Expenses</b>			
Seed	1.85	-	4.85
Fertilizer	6.69	1.96	10.05
Fuel & oil	7.73	7.10	7.68
Repairs	13.69	13.52	9.89
Custom hire	0.80	0.15	0.32
Land rent	12.82	13.70	12.40
Machinery & bldg leases	0.92	3.79	-
Operating interest	1.24	0.53	2.22
Miscellaneous	2.00	2.33	1.94
Total direct expenses per acre	47.72	43.07	49.36
Return over direct exp per acre	29.75	18.60	62.02
<b>Overhead Expenses</b>			
Custom hire	1.90	1.34	3.36
Hired labor	2.14	1.92	1.47
Machinery & bldg leases	0.96	1.16	1.03
Farm insurance	1.33	1.62	0.69
Utilities	0.78	0.73	0.55
Interest	3.13	2.98	2.93
Mach & bldg depreciation	8.37	7.30	6.73
Miscellaneous	1.69	0.75	2.24
Total overhead expenses per acre	20.29	17.80	19.00
Total dir & ovhd expenses per acre	68.02	60.87	68.36
Net return per acre	9.45	0.80	43.02
Lbr & mgt charge per acre	10.27	6.98	7.86
Net return over lbr & mgt	-0.81	-6.18	35.16
Government payments	2.31	0.59	2.34
Net return with govt payments	1.50	-5.59	37.50
<b>Cost of Production</b>			
Total direct expense per ton	31.04	31.76	23.72
Total dir & ovhd exp per ton	44.24	44.88	32.86
With labor & management	50.92	50.03	36.63
Total exp less govt & oth income	49.42	49.59	35.51
Est. labor hours per acre	2.04	1.63	1.60

**Crop Enterprise Analysis**  
**Northland & Central Lakes Community and Technical Colleges**  
**(Farms Sorted By Return to Overhead)**

**Wheat, Spring on Owned Land**

	<u>Avg. Of All Farms</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of fields	119	28	17
Number of farms	84	17	17
Acres	177.19	122.85	169.01
Yield per acre (bu.)	46.57	50.43	66.26
Operators share of yield %	100.00	100.00	100.00
Value per bu.	3.40	3.39	3.69
Total product return per acre	158.50	171.09	244.55
Miscellaneous income per acre	17.67	22.54	11.10
Gross return per acre	176.17	193.63	255.65
<b>Direct Expenses</b>			
Seed	10.73	10.36	12.18
Fertilizer	35.10	34.31	33.60
Crop chemicals	20.29	20.47	16.07
Crop insurance	10.36	10.62	9.89
Drying fuel	1.54	2.49	0.87
Fuel & oil	9.66	8.91	7.50
Repairs	14.11	14.01	14.25
Custom hire	2.71	1.52	1.37
Marketing	0.08	-	0.61
Operating interest	2.90	1.73	2.38
Miscellaneous	0.45	0.21	0.73
Total direct expenses per acre	107.93	104.64	99.45
Return over direct exp per acre	68.24	88.99	156.20
<b>Overhead Expenses</b>			
Custom hire	2.69	1.39	0.89
Hired labor	4.12	3.13	4.05
Machinery & bldg leases	1.66	1.96	1.16
RE & pers. property taxes	4.71	4.33	7.02
Farm insurance	3.38	2.51	3.43
Utilities	2.41	1.77	2.35
Dues & professional fees	1.29	1.34	1.19
Interest	15.63	14.38	21.79
Mach & bldg depreciation	13.15	15.39	13.20
Miscellaneous	1.21	1.35	1.84
Total overhead expenses per acre	50.26	47.54	56.91
Total dir & ovhd expenses per acre	158.19	152.18	156.36
Net return per acre	17.97	41.45	99.29
Lbr & mgt charge per acre	16.94	18.10	15.18
Net return over lbr & mgt	1.03	23.36	84.11
Government payments	13.27	12.84	15.21
Net return with govt payments	14.31	36.20	99.31
<b>Cost of Production</b>			
Total direct expense per bu.	2.32	2.07	1.50
Total dir & ovhd exp per bu.	3.40	3.02	2.36
With labor & management	3.76	3.38	2.59
Total exp less govt & oth income	3.10	2.67	2.19
Est. labor hours per acre	1.67	1.65	1.48



**Crop Enterprise Analysis**  
**Northland & Central Lakes Community and Technical Colleges**  
**(Farms Sorted By Return to Overhead)**

**Wheat, Spring on Cash Rent**

	<u>Avg. Of All Farms</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of fields	154	37	24
Number of farms	101	20	21
Acres	247.44	219.53	292.60
Yield per acre (bu.)	53.24	59.88	61.71
Operators share of yield %	100.00	100.00	100.00
Value per bu.	3.43	3.45	3.81
Total product return per acre	182.35	206.75	234.98
Miscellaneous income per acre	9.75	5.69	8.17
Gross return per acre	192.10	212.44	243.15
<b>Direct Expenses</b>			
Seed	11.63	13.27	12.93
Fertilizer	34.69	36.48	30.96
Crop chemicals	21.18	22.24	14.81
Crop insurance	10.28	10.77	9.66
Drying fuel	1.59	2.02	1.91
Fuel & oil	9.27	9.76	7.44
Repairs	12.90	11.85	13.80
Custom hire	2.62	0.30	1.63
Land rent	38.21	46.60	42.92
Machinery & bldg leases	0.26	0.24	0.54
Operating interest	2.61	2.02	1.52
Miscellaneous	0.96	1.12	1.84
Total direct expenses per acre	146.20	156.67	139.96
Return over direct exp per acre	45.90	55.76	103.19
<b>Overhead Expenses</b>			
Custom hire	1.89	0.63	1.54
Hired labor	4.30	3.11	5.10
Machinery & bldg leases	2.00	3.11	1.24
Farm insurance	2.86	2.13	3.25
Utilities	1.96	1.37	2.24
Dues & professional fees	1.20	1.51	0.98
Interest	2.40	1.60	2.05
Mach & bldg depreciation	10.47	9.67	8.99
Miscellaneous	1.35	1.10	1.55
Total overhead expenses per acre	28.43	24.22	26.94
Total dir & ovhd expenses per acre	174.63	180.90	166.90
Net return per acre	17.47	31.54	76.25
Lbr & mgt charge per acre	17.08	21.31	14.57
Net return over lbr & mgt	0.39	10.23	61.68
Government payments	14.48	15.75	15.13
Net return with govt payments	14.87	25.99	76.81
<b>Cost of Production</b>			
Total direct expense per bu.	2.75	2.62	2.27
Total dir & ovhd exp per bu.	3.28	3.02	2.70
With labor & management	3.60	3.38	2.94
Total exp less govt & oth income	3.15	3.02	2.56
Est. labor hours per acre	1.54	1.58	1.41

**Crop Enterprise Analysis**  
**Northland & Central Lakes Community and Technical Colleges**  
**(Farms Sorted By Return to Overhead)**

**Soybeans on Owned Land**

	<u>Avg. Of All Farms</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of fields	133	25	32
Number of farms	117	24	24
Acres	138.71	159.46	127.18
Yield per acre (bu.)	17.23	16.61	25.06
Operators share of yield %	100.00	100.00	100.00
Value per bu.	5.71	5.55	6.01
Total product return per acre	98.32	92.12	150.70
Miscellaneous income per acre	65.27	62.23	59.93
Gross return per acre	163.59	154.36	210.63
<b>Direct Expenses</b>			
Seed	25.55	19.69	27.00
Fertilizer	10.58	11.78	9.49
Crop chemicals	17.18	20.39	14.37
Crop insurance	11.71	12.04	12.48
Fuel & oil	11.17	11.56	11.17
Repairs	16.96	17.17	16.35
Custom hire	2.02	1.91	1.77
Machinery & bldg leases	0.19	0.56	-
Operating interest	3.50	3.18	4.60
Miscellaneous	0.50	0.05	0.42
Total direct expenses per acre	99.37	98.34	97.65
Return over direct exp per acre	64.22	56.02	112.98
<b>Overhead Expenses</b>			
Custom hire	3.44	2.18	2.97
Hired labor	4.65	4.36	2.49
Machinery & bldg leases	2.01	1.29	1.51
RE & pers. property taxes	6.11	6.52	7.43
Farm insurance	3.58	3.28	3.48
Utilities	2.49	2.56	2.53
Dues & professional fees	1.54	1.18	2.44
Interest	23.83	21.35	23.26
Mach & bldg depreciation	14.05	11.22	20.62
Miscellaneous	2.34	2.43	2.57
Total overhead expenses per acre	64.04	56.36	69.31
Total dir & ovhd expenses per acre	163.41	154.70	166.97
Net return per acre	0.18	-0.34	43.66
Lbr & mgt charge per acre	19.00	18.65	17.41
Net return over lbr & mgt	-18.82	-18.99	26.25
Government payments	14.46	14.32	15.26
Net return with govt payments	-4.36	-4.68	41.50
<b>Cost of Production</b>			
Total direct expense per bu.	5.77	5.92	3.90
Total dir & ovhd exp per bu.	9.49	9.31	6.66
With labor & management	10.59	10.43	7.36
Total exp less govt & oth income	5.96	5.83	4.36
Est. labor hours per acre	2.09	2.03	1.87

**Crop Enterprise Analysis**  
**Northland & Central Lakes Community and Technical Colleges**  
**(Farms Sorted By Return to Overhead)**

**Soybeans on Cash Rent**

	<u>Avg. Of All Farms</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of fields	202	42	39
Number of farms	134	27	27
Acres	267.34	412.45	328.10
Yield per acre (bu.)	16.31	15.81	18.80
Operators share of yield %	100.00	100.00	100.00
Value per bu.	6.07	5.85	6.46
Total product return per acre	99.00	92.51	121.40
Miscellaneous income per acre	70.48	62.75	88.23
Gross return per acre	169.48	155.26	209.62
<b>Direct Expenses</b>			
Seed	24.75	21.81	26.55
Fertilizer	10.77	12.59	9.30
Crop chemicals	16.98	20.21	13.79
Crop insurance	11.69	10.95	13.21
Drying fuel	0.48	0.77	0.25
Fuel & oil	10.61	9.72	10.33
Repairs	15.81	16.48	12.96
Custom hire	1.89	1.25	0.69
Hired labor	0.32	0.04	0.94
Land rent	41.77	38.08	47.47
Machinery & bldg leases	0.42	0.68	-
Operating interest	3.10	2.55	2.85
Miscellaneous	0.40	0.35	0.69
Total direct expenses per acre	138.99	135.46	139.03
Return over direct exp per acre	30.49	19.80	70.60
<b>Overhead Expenses</b>			
Custom hire	1.92	2.99	1.52
Hired labor	3.80	3.66	1.99
Machinery & bldg leases	2.21	2.59	1.59
Farm insurance	2.95	2.81	2.78
Utilities	2.03	2.00	1.66
Dues & professional fees	1.31	1.11	1.35
Interest	3.68	3.46	3.46
Mach & bldg depreciation	12.48	12.57	14.94
Miscellaneous	1.81	1.88	1.17
Total overhead expenses per acre	32.19	33.06	30.45
Total dir & ovhd expenses per acre	171.18	168.53	169.48
Net return per acre	-1.70	-13.27	40.15
Lbr & mgt charge per acre	19.27	17.53	24.23
Net return over lbr & mgt	-20.97	-30.80	15.91
Government payments	14.80	13.48	15.39
Net return with govt payments	-6.17	-17.32	31.31
<b>Cost of Production</b>			
Total direct expense per bu.	8.52	8.57	7.40
Total dir & ovhd exp per bu.	10.49	10.66	9.02
With labor & management	11.68	11.76	10.31
Total exp less govt & oth income	6.45	6.94	4.79
Est. labor hours per acre	1.84	1.70	1.83

**Crop Enterprise Analysis**  
**Northland & Central Lakes Community and Technical Colleges**  
**(Farms Sorted By RoundUp Ready)**

**Soybeans on Cash Rent**

	<u>Avg. Of All Farms</u>	<u>100% RR</u>	<u>No RR</u>	<u>No Answer</u>
Number of fields	202	85	30	87
Number of farms	134	50	14	77
Acres	267.34	196.60	95.50	395.70
Yield per acre (bu.)	16.31	16.84	8.89	16.67
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	6.07	5.92	5.72	6.16
Total product return per acre	99.00	99.68	50.84	102.67
Miscellaneous income per acre	70.48	66.36	99.99	70.02
Gross return per acre	169.48	166.04	150.83	172.70
<b>Direct Expenses</b>				
Seed	24.75	29.47	16.56	23.14
Fertilizer	10.77	9.38	8.96	11.59
Crop chemicals	16.98	13.40	19.04	18.55
Crop insurance	11.69	8.64	10.46	13.27
Drying fuel	0.48	0.61	0.06	0.45
Fuel & oil	10.61	9.98	12.09	10.79
Repairs	15.81	14.84	18.53	16.05
Custom hire	1.89	3.03	1.20	1.40
Land rent	41.77	40.61	31.86	43.16
Machinery & bldg leases	0.42	0.14	-	0.59
Operating interest	3.10	3.18	2.36	3.12
Miscellaneous	0.72	0.57	0.30	0.83
Total direct expenses per acre	138.99	133.87	121.41	142.94
Return over direct exp per acre	30.49	32.18	29.42	29.75
<b>Overhead Expenses</b>				
Custom hire	1.92	1.92	1.73	1.93
Hired labor	3.80	4.01	1.36	3.90
Machinery & bldg leases	2.21	2.34	0.73	2.27
Farm insurance	2.95	3.18	2.82	2.86
Utilities	2.03	1.97	3.36	1.95
Dues & professional fees	1.31	1.38	1.73	1.24
Interest	3.68	3.79	3.27	3.66
Mach & bldg depreciation	12.48	14.25	13.60	11.53
Miscellaneous	1.81	2.09	1.31	1.72
Total overhead expenses per acre	32.19	34.92	29.91	31.05
Total dir & ovhd expenses per acre	171.18	168.79	151.32	174.00
Net return per acre	-1.70	-2.74	-0.49	-1.30
Lbr & mgt charge per acre	19.27	18.19	22.40	19.53
Net return over lbr & mgt	-20.97	-20.93	-22.89	-20.83
Government payments	14.80	14.69	12.86	15.01
Net return with govt payments	-6.17	-6.24	-10.03	-5.82
<b>Cost of Production</b>				
Total direct expense per bu.	8.52	7.95	13.65	8.57
Total dir & ovhd exp per bu.	10.49	10.02	17.01	10.44
With labor & management	11.68	11.10	19.53	11.61
Total exp less govt & oth income	6.45	6.29	6.84	6.51
Est. labor hours per acre	1.84	1.86	1.92	1.82

**Crop Enterprise Analysis**  
**Northland & Central Lakes Community and Technical Colleges**  
**(Farms Sorted By Return to Overhead)**  
**Barley, Canola, and Sunflowers on Cash Rent**

	<b>Barley</b>	<b>Canola</b>	<b>Sunflowers</b>
	<b><u>Avg. Of All Farms</u></b>	<b><u>Avg. Of All Farms</u></b>	<b><u>Avg. Of All Farms</u></b>
Number of fields	25	12	6
Number of farms	18	10	6
Acres	84.56	156.01	99.97
Yield per acre (bu.)	55.46	14.03	16.89
Operators share of yield %	100	100	100
Value per bu.	2.49	10.19	14.17
Total product return per acre	138.23	142.96	239.34
Miscellaneous income per acre	22.73	12.24	6.09
Gross return per acre	160.96	155.20	245.42
<b>Direct Expenses</b>			
Seed	8.65	22.06	22.31
Fertilizer	27.05	40.58	38.64
Crop chemicals	11.55	18.06	20.15
Crop insurance	6.77	7.44	7.95
Drying fuel	1.31		0.80
Fuel & oil	10.01	9.96	12.30
Repairs	14.92	14.32	19.97
Custom hire	1.34	6.01	3.26
Hired labor	0.73		
Land rent	32.38	26.28	37.81
Hauling and trucking			1.87
Operating interest	2.89	1.69	2.27
Miscellaneous	0.84	0.37	0.43
Total direct expenses per acre	118.43	146.78	167.75
Return over direct exp per acre	42.53	8.42	77.67
<b>Overhead Expenses</b>			
Custom hire	1.69	2.70	1.00
Hired labor	2.88	4.77	3.44
Machinery & bldg leases	1.34	0.69	0.95
Farm insurance	2.48	2.17	1.24
Utilities	2.47	2.23	2.80
Dues & professional fees	0.79	1.07	1.53
Interest	3.77	2.11	2.02
Mach & bldg depreciation	10.39	15.99	8.54
Miscellaneous	0.88	0.84	1.97
Total overhead expenses per acre	26.68	32.57	23.49
Total dir & ovhd expenses per acre	145.11	179.35	191.24
Net return per acre	15.85	-24.15	54.18
Lbr & mgt charge per acre	14.19	17.28	20.98
Net return over lbr & mgt	1.66	-41.43	33.19
Government payments	13.00	13.78	12.96
Net return with govt payments	14.67	-27.65	46.15
<b>Cost of Production</b>			
Total direct expense per bu.	2.14	10.46	9.93
Total dir & ovhd exp per bu.	2.62	12.78	11.33
With labor & management	2.87	14.02	12.57
Total exp less govt & oth income	2.23	12.16	11.44
Est. labor hours per acre	1.64	1.67	2.03

**Crop Enterprise Analysis**  
**Northland & Central Lakes Community and Technical College**  
**(Farms Sorted By Return to Overhead)**

**Establish Hay, Alfalfa**

	<u>Owned</u>		<u>Cash Rent</u>	
	<u>Avg. Of All Farms</u>	<u>High 20%</u>	<u>Avg. Of All Farms</u>	<u>High 20%</u>
Number of fields	27	6	28	5
Number of farms	27	6	25	5
Acres	33.92	58.55	35.71	28.20
Yield per acre (ton)	1.98	2.57	1.23	2.23
Operators share of yield %	100.00	100.00	100.00	100.00
Value per ton	69.96	75.03	72.77	67.92
Total product return per acre	138.35	193.17	89.55	151.33
Miscellaneous income per acre	3.37	1.28	5.01	-
Gross return per acre	141.72	194.45	94.55	151.33
<b>Direct Expenses</b>				
Seed	45.84	35.27	47.87	40.80
Fertilizer	16.34	9.72	26.73	30.33
Crop chemicals	5.04	2.07	10.02	8.60
Crop insurance	0.97	1.43	1.00	1.55
Fuel & oil	20.36	22.09	16.54	19.51
Repairs	29.33	27.78	26.14	19.99
Land Rent	-	-	26.50	11.70
Custom hire	5.13	3.98	3.71	1.24
Operating interest	5.64	9.91	3.63	2.17
Miscellaneous	3.84	5.21	3.60	4.62
Total direct expenses per acre	132.49	117.45	165.74	140.52
Return over direct exp per acre	9.23	77.00	-71.19	10.81
<b>Overhead Expenses</b>				
Custom hire	6.89	8.87	4.52	1.21
Hired labor	15.09	16.29	8.20	4.87
Machinery & bldg leases	2.71	3.26	2.30	1.12
RE & pers. property taxes	4.01	3.80	-	-
Farm insurance	2.64	1.96	3.65	3.06
Utilities	2.06	1.97	2.19	2.83
Dues & professional fees	0.95	1.48	0.64	0.20
Interest	21.86	20.3	5.67	5.81
Mach & bldg depreciation	28.55	34.83	22.26	33.37
Miscellaneous	2.80	3.10	2.26	4.56
Total overhead expenses per acre	87.56	95.85	51.7	57.02
Total dir & ovhd expenses per acre	220.05	213.3	217.44	197.54
Net return per acre	-78.33	-18.85	-122.88	-46.21
Lbr & mgt charge per acre	26.35	28.84	23.05	24.46
Net return over lbr & mgt	-104.68	-47.69	-145.93	-70.67
Government payments	12.10	12.85	10.23	5.56
Net return with govt payments	-92.58	-34.84	-135.7	-65.11
<b>Cost of Production</b>				
Total direct expense per ton	67.00	45.62	134.69	63.07
Total dir & ovhd exp per ton	111.27	82.84	176.70	88.66
With labor & management	124.6	94.05	195.43	99.64
Total exp less govt & oth income	116.77	88.56	183.05	97.15
Est. labor hours per acre	5.81	6.40	4.09	4.58

**Crop Enterprise Analysis**  
**Northland & Central Lakes Community and Technical Colleges**  
**(Farms Sorted By Return to Overhead)**

**Irrigated Corn and Corn Silage, on Owned Land**

	<u>Corn</u>	<u>Corn Silage</u>
Number of fields	8	10
Number of farms	7	10
Acres	84.36	74.20
Yield per acre	126.75	16.40
Operators share of yield %	100	100
Value	1.93	19.27
Total product return per acre	244.09	316.03
Miscellaneous income per acre	42.04	27.75
Gross return per acre	286.13	343.79
<b>Direct Expenses</b>		
Seed	46.41	41.39
Fertilizer	61.35	45.54
Crop chemicals	19.38	23.56
Crop insurance	11.82	8.08
Drying fuel	13.55	
Irrigation energy	7.84	11.56
Fuel & oil	16.61	23.24
Repairs	31.08	38.14
Custom hire	22.03	14.56
Operating interest	9.72	3.81
Miscellaneous	1.29	11.28
Total direct expenses per acre	241.09	221.17
Return over direct exp per acre	45.04	122.62
<b>Overhead Expenses</b>		
Custom hire	8.92	18.30
Hired labor	6.83	16.05
Machinery & bldg leases	5.49	4.23
RE & pers. property taxes	6.03	4.60
Farm insurance	3.41	2.86
Utilities	2.76	3.03
Dues & professional fees	0.89	0.62
Interest	50.59	51.3
Mach & bldg depreciation	38.80	22.57
Miscellaneous	3.89	4.47
Total overhead expenses per acre	127.61	128.04
Total dir & ovhd expenses per acre	368.7	349.21
Net return per acre	-82.57	-5.42
Lbr & mgt charge per acre	18.94	16.50
Net return over lbr & mgt	-101.51	-21.93
Government payments	15.23	16.11
Net return with govt payments	-86.29	-5.82
<b>Cost of Production</b>		
Total direct expense per bu.	1.9	13.49
Total dir & ovhd exp per bu.	2.91	21.3
With labor & management	3.06	22.3
Total exp less govt & oth income	2.61	19.63
Est. labor hours per acre	4.29	5.61

**Crop Enterprise Analysis**  
**Northland & Central Lakes Community and Technical Colleges**  
**(Farms Sorted By Return to Overhead)**

	<b>Oats on Owned Land</b>		<b>Oats on Cash Rent</b>	
	<b>Avg. Of All Farms</b>	<b>High 20%</b>	<b>Avg. Of All Farms</b>	<b>High 20%</b>
Number of fields	32	7	28	6
Number of farms	32	7	28	6
Acres	38.12	23.10	44.65	54.48
Yield per acre (bu.)	73.30	91.94	80.92	109.87
Operators share of yield %	100	100	100	100
Value per bu.	1.45	1.63	1.55	1.76
Total product return per acre	106.58	149.47	125.69	193.49
Miscellaneous income per acre	23.36	63.50	29.86	48.50
Gross return per acre	129.94	212.97	155.55	241.99
<b>Direct Expenses</b>				
Seed	7.51	9.90	8.57	7.97
Fertilizer	18.84	6.66	19.68	22.92
Crop chemicals	6.57	6.80	6.28	13.20
Crop insurance	2.89	4.66	2.65	3.08
Fuel & oil	10.18	8.92	9.33	8.65
Repairs	14.67	21.13	15.25	15.44
Custom hire	1.30	-	2.34	-
Land rent	-	-	21.89	34.40
Operating interest	1.25	1.65	1.86	2.60
Miscellaneous	0.83	0.49	1.08	0.20
Total direct expenses per acre	64.02	60.21	88.92	108.45
Return over direct exp per acre	65.91	152.75	66.63	133.54
<b>Overhead Expenses</b>				
Custom hire	1.27	1.79	1.50	1.16
Hired labor	2.90	2.96	5.39	6.86
Machinery & bldg leases	1.14	0.33	1.19	0.71
RE & pers. property taxes	4.19	5.79	-	-
Farm insurance	1.59	1.15	2.54	3.46
Utilities	1.53	1.06	1.20	1.26
Dues & professional fees	0.31	0.54	0.29	0.61
Interest	14.21	17.28	3.16	3.67
Mach & bldg depreciation	10.24	13.13	11.39	12.93
Miscellaneous	1.43	1.17	2.08	3.38
Total overhead expenses per acre	38.83	45.20	28.74	34.04
Total dir & ovhd expenses per acre	102.86	105.41	117.66	142.49
Net return per acre	27.08	107.55	37.90	99.50
Lbr & mgt charge per acre	15.76	16.96	14.31	16.51
Net return over lbr & mgt	11.32	90.59	23.59	82.99
Government payments	7.90	11.79	10.55	15.98
Net return with govt payments	19.22	102.37	34.14	98.97
<b>Cost of Production</b>				
Total direct expense per bu.	0.87	0.65	1.10	0.99
Total dir & ovhd exp per bu.	1.40	1.15	1.45	1.30
With labor & management	1.62	1.33	1.63	1.45
Total exp less govt & oth income	1.19	0.51	1.13	0.86
Est. labor hours per acre	1.98	2.29	2.25	2.52

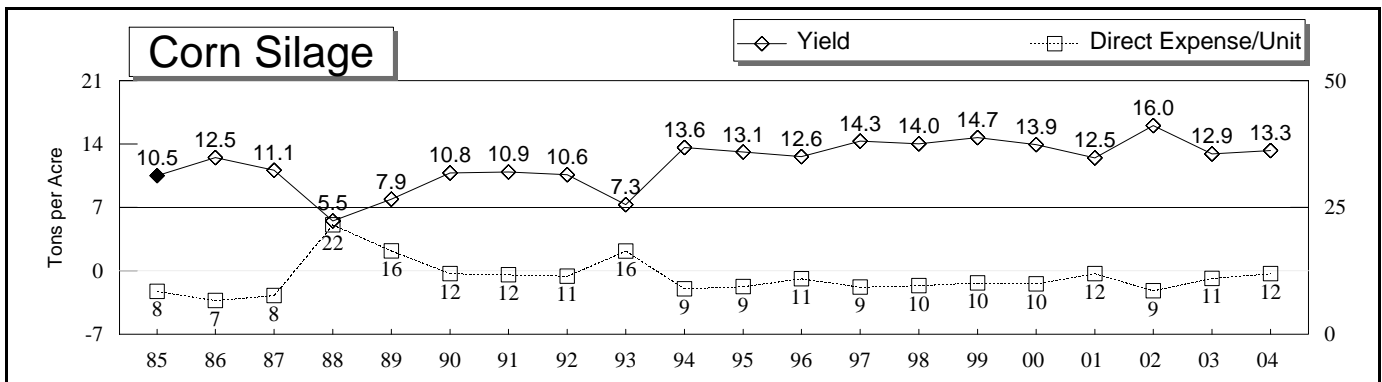
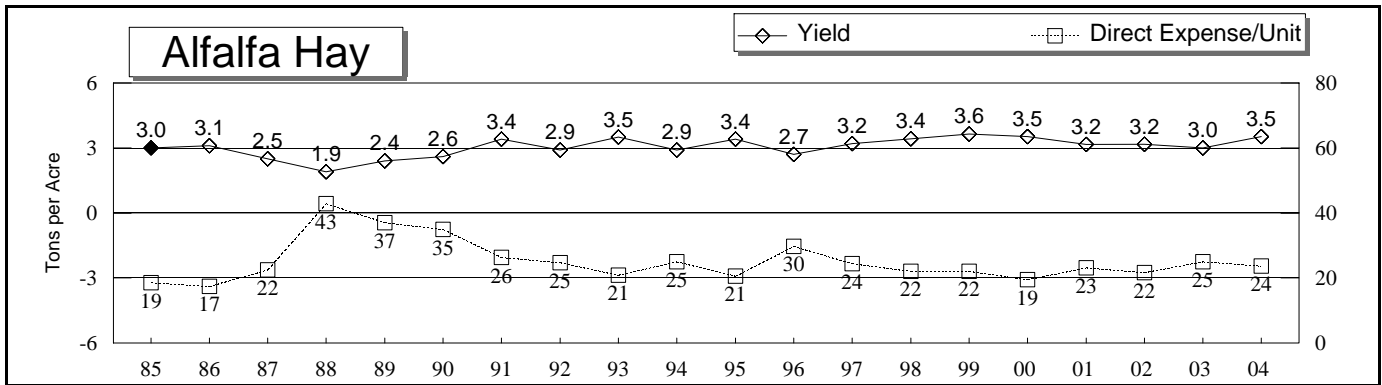
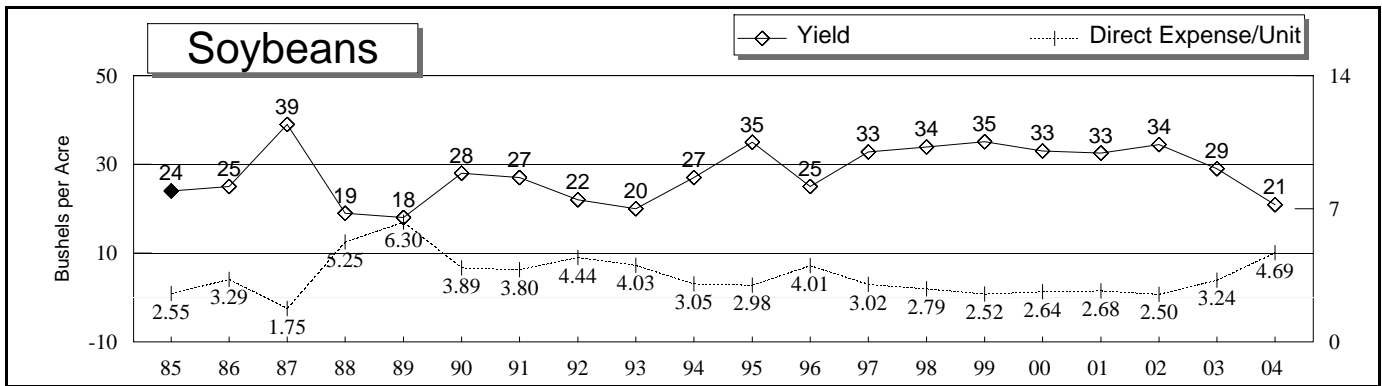
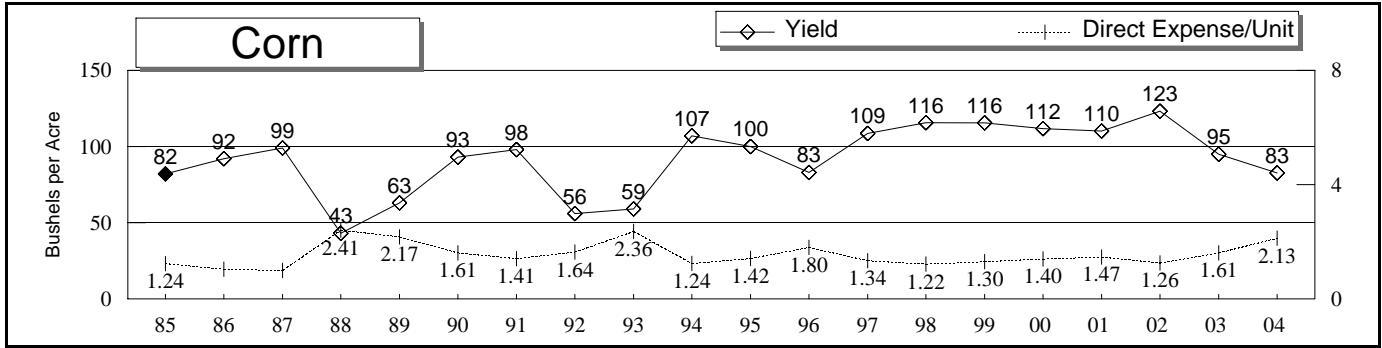


**Crop Enterprise Analysis**  
**Northland & Central Lakes Community and Technical Colleges**  
**(Farms Sorted By Return to Overhead)**

**Prevented Planting and CRP**

	CRP	Prevented Planting	
	<u>Owned</u>	<u>Owned</u>	<u>Rented</u>
Number of fields	38	31	32
Number of farms	33	18	23
Acres	152.97	141.41	260.00
Yield per acre (\$)	44.96	-	-
Operators share of yield %	100	-	-
Value per \$	1	-	-
Total product return per acre	44.96	-	-
Miscellaneous income per acre	0.27	78.98	77.93
Gross return per acre	45.23	78.98	77.93
<b>Direct Expenses</b>			
Seed	-	0.48	-
Fertilizer	-	4.06	4.65
Crop chemicals	-	4.03	4.72
Crop insurance	-	9.93	7.72
Fuel & oil	1.82	6.83	5.96
Repairs	2.68	9.51	8.87
Machinery & bldg leases	-	-	0.78
Land rent	-	-	25.26
Operating interest	-	3.00	3.12
Miscellaneous	-	0.57	0.38
Total direct expenses per acre	5.07	38.41	61.45
Return over direct exp per acre	40.16	40.57	16.49
<b>Overhead Expenses</b>			
<b>Custom hire</b>			
Hired labor	0.44	3.98	3.10
Machinery & bldg leases	-	1.21	2.57
RE & pers. property taxes	3.89	3.66	-
Farm insurance	2.69	3.61	4.24
Utilities	0.49	1.81	1.80
Dues & professional fees	-	0.97	0.64
Interest	14.59	10.17	1.33
Mach & bldg depreciation	1.72	9.34	8.28
Miscellaneous	1.39	1.23	0.90
Total overhead expenses per acre	25.21	39.51	25.39
Total dir & ovhd expenses per acre	30.28	77.93	86.83
Net return per acre	14.94	1.05	-8.90
Lbr & mgt charge per acre	3.15	12.43	11.61
Net return over lbr & mgt	11.79	-11.37	-20.52
Government payments	-	12.89	11.86
Net return with govt payments	11.79	1.51	-8.65
<b>Cost of Production</b>			
Total direct expense per \$	0.11	-	-
Total dir & ovhd exp per \$	0.67	-	-
With labor & management	0.74	-	-
Total exp less govt & oth income	0.74	-	-
Est. labor hours per acre	0.33	1.24	1.10

## A Twenty Year History of Selected Crop Yields



**Livestock Enterprise Analysis**  
**Farm Business Management Statewide Data**  
**(Farms Sorted By Enterprise Size)**

**Dairy -- Average Per Cow**

	<u>Up to 50</u>	<u>51 - 100</u>	<u>101 - 200</u>	<u>201 - 500</u>	<u>Over 500</u>
Number of Cows					
Number of farms	133	229	109	49	13
	Value	Value	Value	Value	Value
Milk sold (lb)	2,759.11	3,107.31	3,229.91	3,559.54	3,633.75
Milk used in home (lb)	4.42	2.19	0.70	0.15	0.40
Milk fed to animals (lb)	8.01	11.40	8.66	3.63	2.31
Dairy Calves sold (hd)	11.57	20.20	24.24	38.81	39.59
Transferred out (hd)	124.86	114.24	112.86	81.14	99.93
Cull sales (hd)	159.56	159.53	146.28	146.63	159.52
Butchered (hd)	6.13	5.12	3.52	1.47	1.24
Less purchased (hd)	-146.22	-64.52	-76.52	-145.98	-187.55
Less transferred in (hd)	-344.63	-374.3	-406.05	-354.94	-470.47
Inventory change (hd)	98.72	55.01	75.48	62.85	113.90
Total production	2,681.53	3,036.20	3,119.07	3,393.31	3,392.63
Other income	56.93	35.71	37.84	29.14	23.13
Gross return	2,738.45	3,071.91	3,156.92	3,422.45	3,415.76
<b>Direct Expenses</b>					
Corn (bu.)	148.09	159.63	173.20	160.66	149.73
Corn Silage (lb.)	114.35	125.00	127.68	150.11	162.5
Hay, Alfalfa (lb.)	228.18	188.37	158.55	187.04	100.17
Hay, Grass & Other (lb.)	36.81	15.07	15.75	6.39	15.08
Haylage, Alfalfa (lb.)	55.44	94.10	94.69	77.24	128.61
Complete Ration (lb.)	101.1	116.63	144.20	187.02	142.48
Protein Vit Minerals (lb.)	297.29	368.19	410.48	428.82	525.26
Other feed stuffs	42.51	42.00	47.75	39.82	53.45
Breeding fees	30.14	36.89	35.23	41.09	33.58
Veterinary	79.06	88.53	96.94	113.97	136.01
BST	8.42	10.94	19.28	33.80	56.03
Supplies	138.95	126.62	130.78	144.03	138.73
DHIA	14.65	16.94	15.87	14.89	7.50
Fuel & oil	41.20	40.23	45.42	50.82	46.11
Repairs	116.13	112.04	109.53	108.36	114.97
Custom hire	9.54	14.12	22.06	35.52	51.03
Hired labor	4.79	9.64	13.94	25.00	79.15
Hauling and trucking	45.03	38.32	29.23	27.20	22.96
Marketing	39.01	40.57	31.81	52.19	96.09
Bedding	11.62	22.49	31.91	48.87	49.68
Total direct expenses	1,562.30	1,666.34	1,754.30	1,932.85	2,109.13
Return over direct expense	1,176.16	1,405.57	1,402.62	1,489.60	1,306.63
<b>Overhead Expenses</b>					
Custom hire	8.92	8.82	14.52	15.30	24.07
Hired labor	47.68	104.57	206.7	337.75	351.64
Machinery & bldg leases	11.89	19.26	23.62	36.05	59.40
Farm insurance	38.83	34.97	33.41	30.76	28.15
Utilities	80.42	72.92	61.97	52.97	48.13
Interest	84.48	95.97	112.17	120.22	143.03
Mach & bldg depreciation	106.02	110.98	131.84	134.62	104.71
Miscellaneous	52.29	45.69	53.35	49.11	45.24
Total overhead expenses	430.53	493.18	637.59	776.78	804.35
Total dir & ovhd expenses	1,992.83	2,159.52	2,391.88	2,709.63	2,913.48
Net return	745.62	912.39	765.03	712.81	502.28
Labor & management charge	293.12	244.52	184.10	163.24	118.70
Net return over lbr & mgt	452.50	667.87	580.93	549.58	383.58
<b>Cost of Production</b>					
Total direct expense per cwt.	9.17	8.68	8.88	8.85	9.62
Total dir & ovhd expense per cwt.	11.70	11.24	12.10	12.41	13.28
With labor and management	13.42	12.52	13.03	13.16	13.82
With other revenue adjustments	13.61	12.77	13.45	13.81	14.83
Est. labor hours per unit	48.54	41.51	38.72	40.15	43.39
<b>Other Information</b>					
Avg. number of Cows	38	70.6	137.8	292.6	751.2
Milk produced per Cow	17,038	19,207	19,762	21,828	21,935
Culling percentage	25.7	24.9	24.9	25.5	30.5
Turnover rate	34.6	32.9	33.7	33.9	38.9
Percent of barn capacity	88.3	107.1	105.8	104.9	115.3
Lbs. milk/lb grain & conc.	2.2	2.4	2.3	2.3	2.1
Feed cost per cwt of milk	6.01	5.77	5.93	5.67	5.82
Feed cost per Cow	1,023.77	1,109.00	1,172.30	1,237.10	1,277.27
Avg. milk price per cwt.	16.29	16.26	16.41	16.33	16.58

**Livestock Enterprise Analysis**  
**Statewide Farm Business Management Data**  
**(Farms Sorted By Return to Overhead)**

**Dairy -- Average Per Cwt Of Milk**

	<u>Avg. Of All Farms</u>		<u>40 - 60%</u>		<u>High 20%</u>	
	533		106		107	
	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms						
Milk sold (lb)	99.68	16.32	99.63	16.30	99.86	16.66
Milk used in home (lb)	0.04	0.01	0.04	0.01	0.02	0.00
Milk fed to animals (lb)	0.27	0.04	0.32	0.05	0.12	0.02
Dairy Calves sold (hd)	0.00	0.14	0.00	0.18	0.00	0.14
Transferred out (hd)	0.00	0.52	0.00	0.44	0.00	0.51
Cull sales (hd)	0.00	0.76	0.00	0.82	0.00	0.72
Butchered (hd)	0.00	0.02	0.00	0.02	0.00	0.01
Less purchased (hd)	0.00	-0.56	0.00	-0.50	0.00	-0.38
Less transferred in (hd)	0.00	-1.93	0.00	-1.97	0.00	-1.80
Inventory change (hd)	0.00	0.37	0.00	0.17	0.00	0.54
Total production		15.67		15.51		16.43
Other income		0.17		0.14		0.16
Gross return		15.84		15.65		16.59
<b>Direct Expenses</b>						
Corn (bu.)	0.37	0.79	0.37	0.80	0.33	0.71
Corn Silage (lb.)	70.89	0.68	69.06	0.67	65.57	0.63
Hay, Alfalfa (lb.)	18.61	0.84	18.29	0.88	16.50	0.75
Haylage, Alfalfa (lb.)	20.83	0.46	17.46	0.33	18.40	0.40
Complete Ration (lb.)	6.08	0.71	6.48	0.77	7.04	0.76
Protein Vit Minerals (lb.)	14.89	2.04	16.30	2.17	14.17	1.70
Other feed stuffs	6.00	0.30	6.86	0.31	3.16	0.20
Breeding fees		0.18		0.15		0.20
Veterinary		0.51		0.53		0.46
BST		0.13		0.16		0.12
Supplies		0.69		0.64		0.58
Fuel & oil		0.22		0.23		0.20
Repairs		0.55		0.48		0.58
Custom hire		0.13		0.12		0.09
Hired labor		0.12		0.15		0.02
Machinery & bldg leases		0.05		0.12		0.00
Hauling and trucking		0.16		0.15		0.15
Marketing		0.25		0.18		0.18
Bedding		0.17		0.16		0.17
Total direct expenses		8.97		9.00		7.89
Return over direct expense		6.87		6.64		8.69
<b>Overhead Expenses</b>						
Custom hire		0.07		0.09		0.09
Hired labor		1.09		1.15		1.38
Machinery & bldg leases		0.15		0.08		0.22
Farm insurance		0.16		0.13		0.15
Utilities		0.31		0.31		0.29
Interest		0.56		0.60		0.41
Mach & bldg depreciation		0.60		0.59		0.61
Miscellaneous		0.24		0.22		0.23
Total overhead expenses		3.17		3.18		3.38
Total dir & ovhd expenses		12.14		12.18		11.27
Net return		3.70		3.46		5.31
Labor & management charge		0.96		0.90		0.90
Net return over lbr & mgt		2.74		2.56		4.41
<b>Cost of Production</b>						
Total direct expense per cwt.		8.97		9.00		7.89
Total dir & ovhd expense per cwt.		12.14		12.18		11.27
With labor and management		13.10		13.08		12.18
With other revenue adjustments		13.62		13.79		12.27
Est. labor hours per unit		0.20		0.21		0.19
<b>Other Information</b>						
Avg. number of Cows		113.2		121.3		133.6
Milk produced per Cow		20,228		20,053		23,014
Culling percentage		26.0		28.2		25.8
Turnover rate		34.4		36.8		32.5
Percent of barn capacity		105.6		105.5		109.0
Lbs. milk/lb grain & conc.		2.3		2.2		2.4
Feed cost per cwt of milk		5.81		5.92		5.14
Feed cost per Cow		1,175.27		1,187.52		1,183.80
Avg. milk price per cwt.		16.37		16.36		16.68

**Livestock Enterprise Analysis**  
**Statewide Farm Business Management Data**  
**(Farms Sorted By Return to Overhead)**

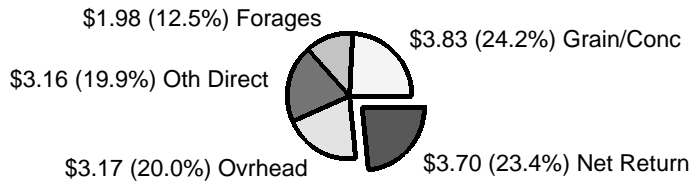
**Dairy -- Average Per Cow**

	<u>Avg. Of All Farms</u>		<u>40 - 60%</u>		<u>High 20%</u>	
	533		106		107	
	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms						
Milk sold (lb)	20,163.80	3,301.24	19,979.06	3,267.93	22,981.23	3,834.02
Milk used in home (lb)	8.40	1.23	8.83	1.28	5.33	0.81
Milk fed to animals (lb)	55.35	7.12	65.05	9.87	27.49	3.59
Dairy Calves sold (hd)	0.19	28.04	0.25	35.73	0.23	33.23
Transferred out (hd)	0.69	104.61	0.63	88.87	0.72	117.29
Cull sales (hd)	0.26	153.17	0.28	164.57	0.26	165.94
Butchered (hd)	0.01	3.31	0.01	3.37	0.00	3.14
Less purchased (hd)	-0.08	-113.61	-0.07	-100.48	-0.06	-87.24
Less transferred in (hd)	-0.32	-390.67	-0.33	-396.01	-0.34	-415.29
Inventory change (hd)	0.03	75.16	0.04	34.69	0.00	124.86
Total production		3,169.60		3,109.82		3,780.35
Other income		34.42		27.54		36.55
Gross return		3,204.03		3,137.36		3,816.90
<b>Direct Expenses</b>						
Corn (bu.)	74.34	160.68	73.71	159.51	76.36	162.83
Corn Silage (lb.)	14,338.73	136.81	13,847.83	133.72	15,091.15	145.41
Hay, Alfalfa (lb.)	3,764.21	169.70	3,667.85	176.11	3,797.60	171.71
Haylage, Alfalfa (lb.)	4,213.49	92.58	3,501.73	67.10	4,234.52	91.25
Complete Ration (lb.)	1,230.74	143.09	1,298.44	154.41	1,619.21	174.29
Protein Vit Minerals (lb.)	3,011.95	412.59	3,269.63	435.25	3,262.13	392.20
Other feed stuffs	1,213.56	59.81	1,375.00	61.42	726.84	46.11
Breeding fees		36.37		30.89		45.17
Veterinary		103.56		106.51		105.51
BST		25.53		31.92		27.60
Supplies		124.15		114.69		117.09
DHIA		14.47		13.71		16.30
Fuel & oil		45.07		46.03		46.11
Repairs		111.36		95.55		132.86
Custom hire		26.77		24.31		20.21
Hired labor		25.20		31.05		4.17
Machinery & bldg leases		10.63		24.39		0.91
Hauling and trucking		31.49		30.18		34.86
Marketing		50.00		36.68		42.47
Bedding		34.59		31.45		39.43
Total direct expenses		1,814.46		1,804.90		1,816.50
Return over direct expense		1,389.56		1,332.46		2,000.40
<b>Overhead Expenses</b>						
Custom hire		14.25		18.23		20.14
Hired labor		220.58		230.36		317.96
Machinery & bldg leases		30.21		16.51		51.53
Farm insurance		32.80		26.65		35.33
Utilities		62.07		62.76		65.94
Interest		112.41		121.24		93.96
Mach & bldg depreciation		120.36		117.62		141.12
Miscellaneous		48.89		44.38		52.01
Total overhead expenses		641.58		637.74		777.99
Total dir & ovhd expenses		2,456.04		2,442.63		2,594.49
Net return		747.98		694.73		1,222.41
Labor & management charge		193.89		181.23		207.94
Net return over lbr & mgt		554.09		513.50		1,014.47
<b>Cost of Production</b>						
Total direct expense per cwt.		8.97		9.00		7.89
Total dir & ovhd expense per cwt.		12.14		12.18		11.27
With labor and management		13.10		13.08		12.18
With other revenue adjustments		13.62		13.79		12.27
Est. labor hours per unit		41.39		42.68		43.27
<b>Other Information</b>						
Avg. number of Cows		113.2		121.3		133.6
Milk produced per Cow		20,228		20,053		23,014
Culling percentage		26.0		28.2		25.8
Turnover rate		34.4		36.8		32.5
Percent of barn capacity		105.6		105.5		109.0
Lbs. milk/lb grain & conc.		2.3		2.2		2.4
Feed cost per cwt of milk		5.81		5.92		5.14
Feed cost per Cow		1,175.27		1,187.52		1,183.80
Avg. milk price per cwt.		16.37		16.36		16.68

## Summary of Selected Dairy Enterprise Factors

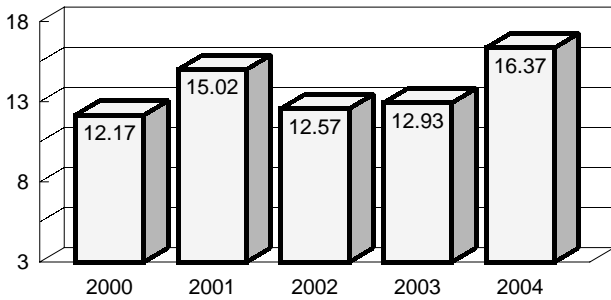
### Dairy Cow Costs & Returns

(Per CWT Produced)

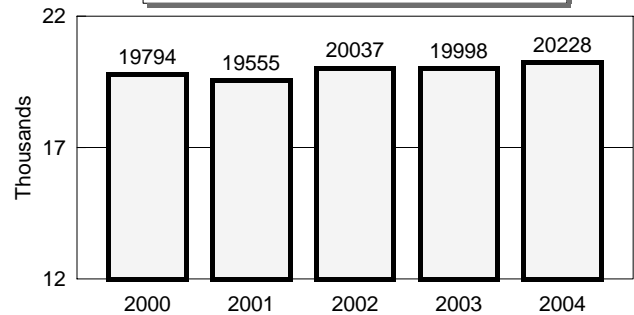


The data on this page is from the Dairy Cow Enterprise and does not include costs related to Dairy Replacements.

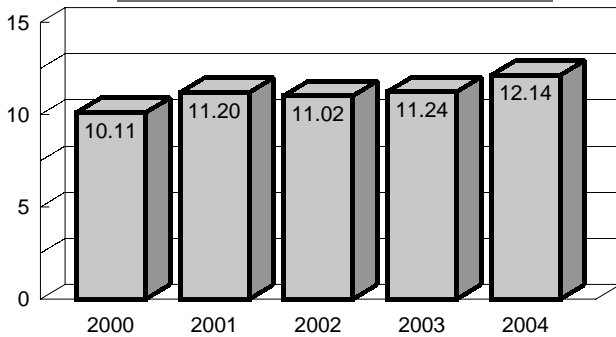
#### Ave Milk Price Recv'd



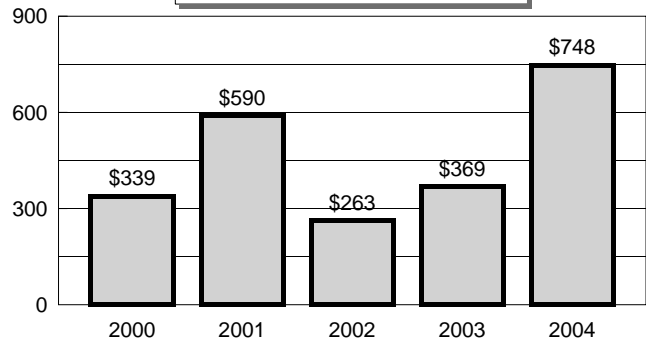
#### Milk Production per Cow



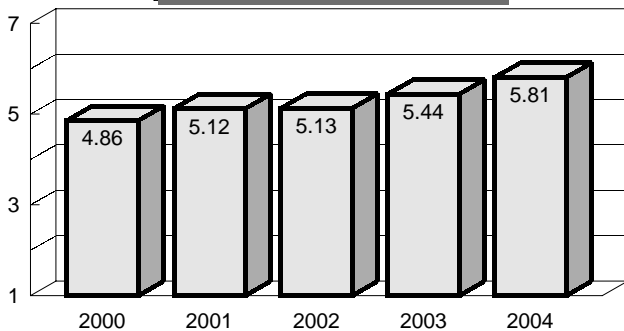
#### Dir & Ovhd Exp per CWT



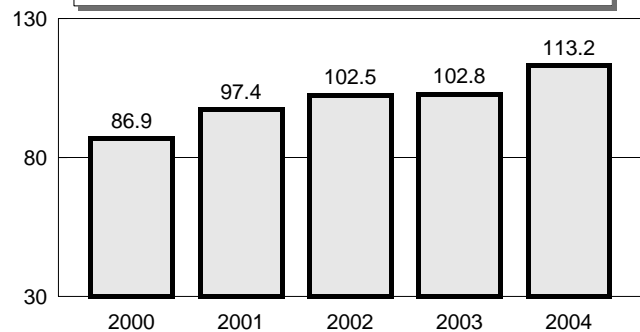
#### Net Return per Cow



#### Feed Cost per CWT



#### Ave. Number of Cows



**Livestock Enterprise Analysis**  
**Statewide Farm Business Management Data**  
**(Farms Sorted By Return to Overhead)**

**Dairy and Repl Heifers -- Average Per Cow**

	<u>Avg. Of All Farms</u>		<u>40 - 60%</u>		<u>High 20%</u>	
	397		80		80	
	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms		397		80		80
Milk sold (lb)	20,234.47	3,320.72	20,627.98	3,363.27	22,622.43	3,780.09
Milk used in home (lb)	7.20	1.11	6.30	1.01	3.80	0.60
Milk fed to animals (lb)	42.85	5.36	30.51	3.97	14.75	2.50
Dairy Calves sold (hd)	0.36	87.53	0.37	75.89	0.42	118.70
Transferred out (hd)	1.07	522.97	1.05	526.79	1.11	570.60
Cull sales (hd)	0.29	155.98	0.36	173.01	0.26	147.83
Butchered (hd)	0.01	4.35	0.01	3.02	0.01	4.36
Less purchased (hd)	-0.12	-137.88	-0.09	-108.80	-0.09	-118.68
Less transferred in (hd)	-0.96	-505.27	-0.97	-516.20	-1.01	-541.67
Inventory change (hd)	0.07	121.90	0.07	66.16	0.07	199.00
Total production		3,576.79		3,588.12		4,163.34
Other income		32.61		32.77		29.01
Gross return		3,609.39		3,620.90		4,192.35
<b>Direct Expenses</b>						
Corn (bu.)	83.25	179.90	80.37	177.87	84.40	179.59
Corn Silage (lb.)	18,970.50	179.30	19,007.86	182.96	19,467.54	187.19
Hay, Alfalfa (lb.)	4,812.30	218.74	4,093.63	194.17	4,343.43	199.82
Haylage, Alfalfa (lb.)	4,838.32	106.28	4,329.95	96.57	6,111.23	127.99
Complete Ration (lb.)	1,255.91	145.87	898.63	105.66	1,071.70	108.66
Protein Vit Minerals (lb.)	3,388.09	476.59	4,124.52	562.57	4,106.92	484.18
Other feed stuffs	2,314.19	100.11	2,647.77	116.41	2,022.70	94.31
Breeding fees		43.02		38.53		50.22
Veterinary		115.65		124.14		115.55
BST		25.74		34.88		27.97
Supplies		136.75		122.69		136.51
Contract production exp.		47.92		78.77		44.63
Fuel & oil		49.68		48.13		48.04
Repairs		126.68		114.65		138.11
Custom hire		38.82		56.38		40.43
Hired labor		22.07		32.35		5.77
Machinery & bldg leases		11.42		18.71		0.49
Hauling and trucking		31.27		25.46		33.20
Marketing		46.14		40.59		42.68
Bedding		40.44		42.90		46.87
Total direct expenses		2,142.38		2,214.42		2,112.21
Return over direct expense		1,467.01		1,406.48		2,080.14
<b>Overhead Expenses</b>						
Custom hire		16.33		23.69		22.61
Hired labor		250.76		249.23		348.23
Machinery & bldg leases		28.97		20.40		39.63
Farm insurance		36.45		29.42		37.47
Utilities		72.59		66.68		73.96
Interest		127.84		131.66		114.02
Mach & bldg depreciation		139.96		143.81		155.83
Miscellaneous		55.02		49.82		58.99
Total overhead expenses		727.93		714.72		850.74
Total dir & ovhd expenses		2,870.31		2,929.14		2,962.95
Net return		739.08		691.76		1,229.40
Labor & management charge		223.34		184.79		247.11
Net return over lbr & mgt		515.74		506.97		982.29
<b>Cost of Production</b>						
Total direct expense per cwt.		10.56		10.72		9.33
Total dir & ovhd expense per cwt.		14.15		14.17		13.09
With labor and management		15.25		15.07		14.18
With other revenue adjustments		13.86		13.85		12.37
Est. labor hours per unit		49.13		47.83		50.00
<b>Other Information</b>						
Avg. number of Cows		110.2		142.9		128.7
Milk produced per Cow		20,285		20,665		22,641
Culling percentage		28.5		35.6		25.6
Turnover rate		42.9		48.5		35.3
Percent of barn capacity		105.8		109.9		108.9
Lbs. milk/lb grain & conc.		2.0		2.0		2.2
Feed cost per cwt of milk		6.94		6.95		6.10
Feed cost per Cow		1,406.79		1,436.21		1,381.73
Avg. milk price per cwt.		16.41		16.30		16.71

**Livestock Enterprise Analysis**  
**Statewide Farm Business Management Data**  
**(Farms Sorted By Return to Overhead)**

**Dairy Replacement Heifers -- Average Head**

	Avg. Of All Farms		40 - 60%		High 20%	
	471		94		95	
	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms						
Replacements sold (hd)	0.21	81.41	0.25	88.07	0.11	98.17
Transferred out (hd)	0.41	464.15	0.40	455.91	0.38	499.58
Cull sales (hd)	0.03	6.89	0.01	4.26	0.08	11.82
Butchered (hd)	0.00	1.77	0.00	1.91	0.00	1.23
Less purchased (hd)	-0.05	-30.58	-0.04	-23.51	-0.05	-21.02
Less transferred in (hd)	-0.71	-114.35	-0.72	-136.96	-0.62	-103.26
Inventory change (hd)	0.04	42.47	0.05	65.18	0.09	137.19
Total production (hd)	0.00	451.75	0.00	454.85	0.00	623.70
Other income		1.54		0.79		6.35
Gross return		453.29		455.64		630.05
<b>Direct Expenses</b>						
Corn (bu.)	11.57	25.24	12.90	28.01	9.82	20.60
Corn Silage (lb.)	5026.67	47.26	4309.75	41.14	4954.04	45.97
Hay, Alfalfa (lb.)	1244.04	50.36	1234.43	48.42	1042.79	42.36
Hay, Grass & Other (lb.)	662.96	18.02	653.25	17.57	610.29	16.73
Haylage, Alfalfa (lb.)	647.05	13.45	949.44	17.27	845.06	18.27
Oatlage (lb.)	498.85	3.95	492.74	4.55	809.11	6.99
Complete Ration (lb.)	222.97	27.03	233.51	23.41	89.14	11.86
Milk (lb.)	35.54	5.02	34.11	3.71	13.77	1.78
Milk Replacer (lb.)	12.26	10.76	13.98	12.45	14.62	13.48
Protein Vit Minerals (lb.)	289.40	51.57	297.74	54.03	327.05	54.78
Other feed stuffs	388.05	13.53	280.03	15.12	322.50	13.45
Breeding fees		7.49		8.07		5.59
Veterinary		13.67		14.16		15.07
Supplies		11.73		10.10		11.02
Contract production exp.		45.45		14.30		19.65
Fuel & oil		7.99		8.45		8.15
Repairs		19.69		22.10		18.91
Custom hire		9.48		25.65		2.75
Machinery & bldg leases		1.71		1.88		2.46
Bedding		5.67		3.94		5.64
Total direct expenses		389.06		374.32		335.50
Return over direct expense		64.23		81.33		294.55
<b>Overhead Expenses</b>						
Custom hire		2.57		1.36		2.52
Hired labor		31.86		41.38		30.88
Machinery & bldg leases		3.62		3.70		5.52
Farm insurance		5.65		5.83		6.29
Utilities		10.88		11.16		10.27
Interest		17.92		17.70		19.08
Mach & bldg depreciation		21.23		22.70		20.77
Miscellaneous		8.01		7.32		7.36
Total overhead expenses		101.74		111.14		102.70
Total dir & ovhd expenses		490.80		485.46		438.21
Net return		-37.51		-29.82		191.85
Labor & management charge		35.94		39.34		34.29
Net return over lbr & mgt		-73.45		-69.15		157.56
<b>Cost of Production</b>						
Total direct expense per head		389.06		374.32		335.50
Total dir & ovhd expense per head		490.80		485.46		438.21
With labor and management		526.74		524.80		472.50
With other revenue adjustments		525.20		524.01		466.15
Est. labor hours per unit		7.27		7.09		8.14
<b>Other Information</b>						
No. purchased or trans in		71.00		73.00		68.00
Number sold or trans out		58.00		63.00		49.00
Average number of head		94.00		95.00		101.00
Percentage death loss		4.60		5.10		3.40
Feed cost per average head		266.18		265.67		246.27
Feed cost/head sold+trans		433.27		404.05		505.81
Avg. purch price / head		608.19		548.50		385.06
Avg. sales price / head		395.63		346.19		894.82



**Livestock Enterprise Analysis**  
**Statewide Farm Business Management Data**  
**(Farms Sorted By Return to Overhead)**

**Dairy Steers -- Average Per Cwt. Produced**

	<u>Avg. Of All Farms</u>		<u>40 - 60%</u>		<u>High 20%</u>	
Number of farms	140		28		28	
	Quantity	Value	Quantity	Value	Quantity	Value
Dairy Steers sold (lb)	136.29	102.87	108.32	81.83	112.99	88.59
Transferred out (lb)	0.35	0.31	0.08	0.05	-	-
Cull sales (lb)	1.19	0.95	-	-	1.75	1.56
Butchered (lb)	2.22	1.80	2.19	1.65	3.30	2.60
Less purchased (lb)	-38.63	-38.77	-16.61	-20.13	-9.12	-9.36
Less transferred in (lb)	-6.45	-6.84	-4.66	-4.46	-13.21	-15.70
Inventory change (lb)	5.02	12.81	10.68	13.99	4.29	15.38
Total production (lb)	100.00	73.14	100.00	72.92	100.00	83.08
Other income		0.02		-		0.19
Gross return		73.16		72.92		83.27
<b>Direct Expenses</b>						
Corn (bu.)	11.01	24.21	10.87	23.48	10.05	22.01
Corn Silage (lb.)	209.81	1.93	210.73	1.97	212.38	1.70
Hay, Alfalfa (lb.)	34.05	1.28	18.20	0.72	55.25	1.97
Hay, Grass & Other (lb.)	32.55	0.91	29.67	0.98	31.97	0.72
Complete Ration (lb.)	204.35	1.67	3.06	0.41	0.99	0.09
Milk Replacer (lb.)	0.62	0.67	1.97	1.75	0.56	0.54
Protein Vit Minerals (lb.)	69.30	10.23	62.10	12.40	63.88	8.49
Other feed stuffs	27.74	1.20	18.95	0.55	11.64	1.11
Veterinary		1.81		1.95		0.83
Supplies		1.69		0.99		0.66
Fuel & oil		1.14		1.03		0.73
Repairs		2.68		3.15		1.68
Hired labor		0.18		0.69		0.03
Machinery & bldg leases		0.20		-		0.54
Hauling and trucking		0.70		0.41		0.63
Marketing		0.83		1.12		0.81
Bedding		0.55		0.52		0.39
Operating interest		1.35		1.07		0.26
Total direct expenses		53.21		53.18		43.18
Return over direct expense		19.96		19.73		40.09
<b>Overhead Expenses</b>						
Hired labor		1.26		1.31		1.60
Machinery & bldg leases		0.26		0.24		0.42
Farm insurance		1.10		1.03		0.65
Utilities		1.32		1.16		0.97
Interest		1.82		2.06		1.41
Mach & bldg depreciation		2.79		2.02		2.58
Miscellaneous		1.51		1.05		1.47
Total overhead expenses		10.05		8.87		9.10
Total dir & ovhd expenses		63.26		62.05		52.29
Net return		9.90		10.87		30.98
Labor & management charge		5.33		4.99		3.95
Net return over lbr & mgt		4.57		5.88		27.03
<b>Cost of Production</b>						
Total direct expense per cwt.		60.93		57.32		43.10
Total dir & ovhd expense per cwt.		68.28		65.50		51.16
With labor and management		72.19		70.11		54.65
With other revenue adjustments		72.17		70.11		54.48
Est. labor hours per unit		0.79		0.75		0.63
<b>Other Information</b>						
No. purchased or trans in		86		86		44
Number sold or trans out		73		63		36
Percentage death loss		2.8		5.8		2.2
Avg. daily gain (lbs)		2.33		2.29		2.27
Lbs of conc / lb of gain		9.00		6.79		6.27
Lbs of feed / lb of gain		10.46		8.09		7.81
Feed cost per cwt of gain		42.09		42.25		36.63
Feed cost per head		382.77		458.39		408.20
Average purchase weight		412		197		247
Average sales weight		1,338		1,419		1,306
Avg purch price / head		413.58		238.75		253.32
Avg sales price / cwt		75.48		75.54		78.41

**Livestock Enterprise Analysis**  
**Statewide Farm Business Management Data**  
**(Farms Sorted By Return to Overhead)**

**All Beef Backgrounding -- Average Per Head**

	<b>Avg. Of All Farms</b>	
Number of farms	20	
	Quantity	Value
Backgnd Beef sold (lb)	473.64	447.99
Transferred out (lb)	31.84	23.45
Butchered (lb)	14.44	10.17
Less purchased (lb)	-124.09	-130.44
Less transferred in (lb)	-309.15	-336.53
Inventory change (lb)	151.17	197.21
Total production (lb)	237.85	211.86
Other income		-
Gross return		211.86
<b>Direct Expenses</b>		
Corn (bu.)	6.77	14.97
Corn Silage (lb.)	1,387.13	13.96
Hay, Alfalfa (lb.)	246.71	5.05
Hay, Grass & Other (lb.)	524.26	13.62
Oats (bu.)	2.59	3.64
Pasture, Intensive (aum)	0.08	1.42
Stover (lb.)	74.46	0.54
Complete Ration (lb.)	208.19	9.73
Creep / Starter (lb.)	15.14	1.36
Protein Vit Minerals (lb.)	159.54	12.86
Other feed stuffs	15.86	1.87
Veterinary		8.40
Supplies		4.43
Fuel & oil		4.22
Repairs		4.13
Hauling and trucking		2.11
Marketing		11.70
Operating interest		2.64
Total direct expenses		116.64
Return over direct expense		95.21
<b>Overhead Expenses</b>		
Hired labor		0.62
Machinery & bldg leases		0.35
Farm insurance		2.06
Utilities		1.73
Interest		3.52
Mach & bldg depreciation		4.35
Miscellaneous		1.66
Total overhead expenses		14.28
Total dir & ovhd expenses		130.93
Net return		80.93
Labor & management charge		15.22
Net return over lbr & mgt		65.71
<b>Cost of Production</b>		
Total direct expense per cwt.		74.43
Total dir & ovhd expense per cwt.		77.25
With labor and management		80.27
With other revenue adjustments		80.27
Est. labor hours per unit		1.98
<b>Other Information</b>		
No. purchased or trans in		86
Number sold or trans out		65
Percentage death loss		1.8
Avg. daily gain (lbs)		1.10
Lbs of conc / lb of gain		3.62
Lbs of feed / lb of gain		9.04
Feed cost per cwt of gain		33.22
Feed cost per head		79.01
Average purchase weight		394
Average sales weight		695
Avg purch price / cwt		105.11
Avg sales price / cwt		94.58

**Livestock Enterprise Analysis**  
**Statewide Farm Business Management Data**  
**(Farms Sorted By Return to Overhead)**

**Beef Cow-Calf -- Average Per Cow**

	<u>Avg. Of All Farms</u>		<u>40 - 60%</u>		<u>High 20%</u>	
Number of farms	124		25		25	
	Quantity	Value	Quantity	Value	Quantity	Value
Beef Calves sold (lb)	257.33	264.96	309.64	316.23	295.02	313.85
Transferred out (lb)	230.92	251.36	213.09	218.53	229.07	244.59
Cull sales (lb)	111.92	80.11	113.68	68.74	128.21	74.56
Butchered (lb)	3.74	3.04	6.96	5.22	3.97	2.86
Less purchased (lb)	-62.21	-71.07	-68.73	-81.27	-62.05	-57.70
Less transferred in (lb)	-24.84	-24.35	-30.41	-32.54	-21.10	-18.06
Inventory change (lb)	41.51	62.00	-19.23	28.57	99.94	124.30
Total production (lb)	558.36	566.06	524.99	523.47	673.06	684.41
Other income		0.64		1.27		-
Gross return		566.70		524.74		684.41
<b>Direct Expenses</b>						
Corn (bu.)	3.24	7.02	2.63	4.77	1.47	3.31
Corn Silage (lb.)	5,155.90	46.52	6,155.39	52.26	4,774.93	43.28
Hay, Alfalfa (lb.)	1,618.32	46.32	1,282.52	17.95	1,563.81	48.56
Hay, Grass & Other (lb.)	4,311.79	96.56	4,464.74	100.97	4,621.67	90.61
Pasture (aum)	4.32	36.13	4.57	33.06	3.01	33.39
Complete Ration (lb.)	95.77	11.83	94.82	9.32	55.10	8.84
Creep / Starter (lb.)	25.02	2.09	78.25	6.65	30.23	2.41
Protein Vit Minerals (lb.)	147.15	22.51	101.63	24.95	175.28	19.53
Other feed stuffs	782.82	10.06	961.49	15.13	495.94	4.07
Breeding fees		3.59		4.40		1.92
Veterinary		20.18		20.69		20.31
Supplies		13.90		12.95		7.27
Fuel & oil		13.31		10.72		10.89
Repairs		24.69		21.56		26.46
Marketing		5.33		2.79		8.98
Operating interest		5.71		3.74		6.38
Total direct expenses		365.74		341.90		336.21
Return over direct expense		200.96		182.84		348.19
<b>Overhead Expenses</b>						
Hired labor		7.91		2.46		8.76
RE & pers. property taxes		3.55		1.40		5.43
Farm insurance		9.45		6.95		9.78
Utilities		11.52		8.88		12.96
Interest		16.42		15.42		16.15
Mach & bldg depreciation		24.34		13.83		31.34
Miscellaneous		11.67		10.31		9.22
Total overhead expenses		84.85		59.25		93.65
Total dir & ovhd expenses		450.59		401.15		429.86
Net return		116.11		123.59		254.55
Labor & management charge		69.35		43.50		94.76
Net return over lbr & mgt		46.75		80.08		159.79
<b>Cost of Production</b>						
Total direct expense per cwt.		65.50		65.12		49.95
Total dir & ovhd expense per cwt.		80.70		76.41		63.87
With labor and management		78.34		84.70		77.94
With other revenue adjustments		70.08		78.12		65.12
Est. labor hours per unit		9.59		5.95		11.93
<b>Other Information</b>						
Number of cows		68.3		78.7		76.6
Pregnancy percentage		96.5		96.8		97.4
Pregnancy loss percentage		0.9		0.5		1.5
Culling percentage		10.9		10.4		10.0
Calving percentage		95.6		96.3		96.0
Weaning percentage		90.4		91.2		91.1
Calves sold per cow		0.86		0.91		0.86
Calf death loss percent		5.3		4.2		5.2
Average weaning weight		537		548		541
Lbs weaned/exposed female		486		499		493
Feed cost per cow		279.03		265.04		254.00
Avg wgt/Beef Calf sold		604		611		598
Avg price / cwt		102.97		102.13		106.38

**Livestock Enterprise Analysis**  
**Statewide Farm Business Management Data**  
**(Farms Sorted By Return to Overhead)**

**Hogs, Finish Feeder Pigs -- Average Per Cwt. Produced**

	<u>Avg. Of All Farms</u>		<u>40 - 60%</u>		<u>High 20%</u>	
	86		17		18	
	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms						
Finish Hogs sold (lb)	115.18	59.17	125.37	60.67	114.07	63.57
Transferred out (lb)	1.37	0.80	0.16	0.09	2.73	1.77
Cull sales (lb)	0.11	0.03	0.39	0.13	-	-
Butchered (lb)	0.07	0.04	0.11	0.06	0.23	0.08
Less purchased (lb)	-11.73	-14.81	-19.66	-21.05	-11.83	-11.91
Less transferred in (lb)	-5.61	-7.47	-5.47	-5.47	-5.76	-9.60
Inventory change (lb)	0.60	2.42	-0.90	3.12	0.57	4.58
Total production (lb)	100.00	40.18	100.00	37.56	100.00	48.49
Other income		0.34		0.30		-
Gross return		40.52		37.86		48.49
<b>Direct Expenses</b>						
Corn (bu.)	2.24	4.88	3.28	7.40	3.46	7.07
Complete Ration (lb.)	136.52	10.61	14.52	0.82	58.59	3.88
Protein Vit Minerals (lb.)	41.24	5.65	93.35	11.85	55.44	8.72
Other feed stuffs	0.74	0.13	0.30	0.10	2.81	0.42
Veterinary		0.60		0.40		0.26
Supplies		0.36		0.38		0.23
Contract production exp.		1.29		-		1.45
Fuel & oil		0.25		0.23		0.43
Repairs		0.56		0.59		0.65
Custom hire		0.66		0.40		0.18
Machinery & bldg leases		1.35		-		0.02
Hauling and trucking		0.43		0.22		0.75
Marketing		1.22		0.35		1.59
Operating interest		0.39		0.38		0.24
Total direct expenses		28.37		23.13		25.90
Return over direct expense		12.15		14.73		22.60
<b>Overhead Expenses</b>						
Custom hire		0.10		0.09		0.37
Hired labor		0.44		0.40		0.93
Machinery & bldg leases		0.36		0.36		0.26
Farm insurance		0.28		0.45		0.32
Utilities		0.32		0.49		0.41
Interest		0.56		0.94		0.93
Mach & bldg depreciation		0.76		1.40		1.21
Miscellaneous		0.33		0.67		0.39
Total overhead expenses		3.16		4.80		4.82
Total dir & ovhd expenses		31.53		27.93		30.71
Net return		8.99		9.93		17.78
Labor & management charge		1.04		1.93		1.14
Net return over lbr & mgt		7.95		8.00		16.64
<b>Cost of Production</b>						
Total direct expense per cwt.		41.33		36.91		36.60
Total dir & ovhd expense per cwt.		44.04		40.73		40.72
With labor and management		44.93		42.27		41.70
With other revenue adjustments		44.64		42.03		41.70
Est. labor hours per unit		0.12		0.16		0.14
<b>Other Information</b>						
No. purchased or trans in		6,252		3,957		4,727
Number sold or trans out		5,788		3,615		4,350
Percentage death loss		3.6		2.5		3.2
Avg. daily gain (lbs)		1.47		1.48		1.39
Lbs of conc / lb of gain		3.05		2.92		3.14
Lbs of feed / lb of gain		3.05		2.92		3.14
Feed cost per cwt of gain		21.28		20.17		20.09
Feed cost per head		47.35		43.00		44.67
Average purchase weight		36		45		48
Average sales weight		261		262		254
Avg purch price / head		45.82		48.51		48.34
Avg sales price / cwt		51.37		48.39		55.73

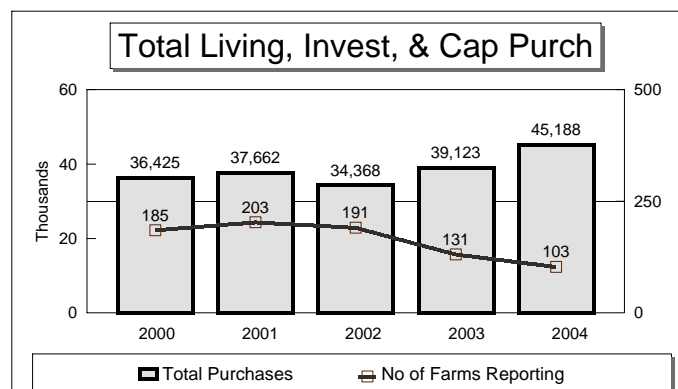
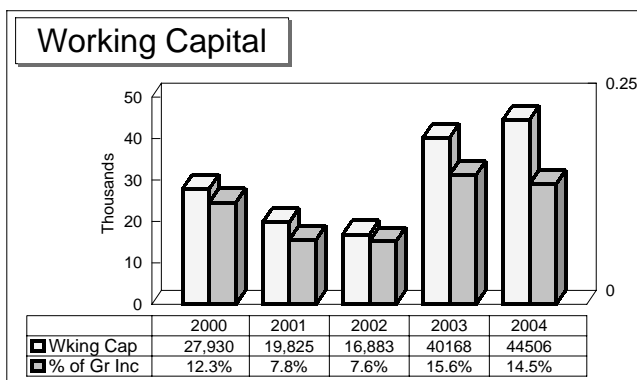
**Livestock Enterprise Analysis**  
**Northland & Central Lakes Community and Technical Colleges**  
**(Farms Sorted By Return to Overhead)**

**Hogs, Farrow To Finish - Average**

	<u>Per CWT</u>		<u>Per Litter</u>	
	<u>Quantity</u>	<u>Value</u>	<u>Quantity</u>	<u>Value</u>
Number of farms	48		48	
Raised Hogs sold (lb)	94.88	48.88	2099.43	1081.50
Transferred out (lb)	0.48	0.34	10.65	7.48
Cull sales (lb)	5.33	2.15	117.89	47.62
Butchered (lb)	0.15	0.09	3.41	1.97
Less purchased (lb)	-1.05	-1.17	-23.29	-25.94
Less transferred in (lb)	-0.07	-0.06	-1.54	-1.31
Inventory change (lb)	0.28	3.03	6.16	67.06
Total production (lb)	100.00	53.26	2212.71	1178.38
Other income		-0.55		-12.10
Gross return		52.71		1166.28
<b>Direct Expenses</b>				
Corn (bu.)	3.74	8.25	82.67	182.61
Complete Ration (lb.)	41.34	4.52	914.73	100.08
Protein Vit Minerals (lb.)	85.62	10.34	1894.54	228.77
Corn Distillers Grn (dry) (lb.)	5.53	0.31	122.46	6.92
Other feed stuffs	0.28	0.23	6.18	5.16
Breeding fees		0.72		15.90
Veterinary		1.63		36.13
Supplies		0.76		16.82
Fuel & oil		0.58		12.80
Repairs		0.96		21.22
Custom hire		1.43		31.71
Machinery & bldg leases		1.05		23.21
Livestock leases		0.22		4.85
Utilities		0.10		2.25
Hauling and trucking		0.26		5.78
Marketing		0.33		7.34
Operating interest		0.36		8.02
Total direct expenses		32.07		709.58
Return over direct expense		20.64		456.70
<b>Overhead Expenses</b>				
Custom hire		0.18		4.05
Hired labor		3.07		68.00
Machinery & bldg leases		1.05		23.25
Farm insurance		0.44		9.84
Utilities		0.68		15.09
Dues & professional fees		0.18		4.09
Interest		0.93		20.64
Mach & bldg depreciation		1.80		39.89
Miscellaneous		0.28		6.22
Total overhead expenses		8.64		191.08
Total dir & ovhd expenses		40.70		900.66
Net return		12.00		265.62
Labor & management charge		1.87		41.31
Net return over lbr & mgt		10.14		224.31
<b>Cost of Production</b>				
Total direct expense per cwt.		32.07		32.07
Total dir & ovhd expense per cwt.		40.70		40.70
With labor and management		42.57		42.57
With other revenue adjustments		42.05		42.05
Est. labor hours per unit		0.32		7.17
<b>Other Information</b>				
Average number of sows		261.80		261.80
Litters farrowed		526.00		526.00
Litters per sow		2.01		2.01
Litters per crate		11.69		11.69
Pigs born per litter		10.34		10.34
Pigs weaned per litter		9.29		9.29
Pigs weaned per sow		18.64		18.64
Number sold per litter		8.19		8.19
Lbs of feed / lb of gain		3.44		3.44
Feed cost / cwt. of gain		23.66		23.66
Feed cost per litter		523.55		523.55
Avg wgt/Raised Hog sold		256.00		256.00
Avg price / cwt		51.51		51.51

## Financial Summary Trends

	2000	2001	2002	2003	2004
<b>Income Statement</b>					
Gross Cash Farm Income	226,234	252,591	221,968	256,709	306,049
Total Cash Farm Expense	183,588	197,921	180,868	205,680	242,120
Net Cash Farm Income	42,646	54,670	41,100	51,029	63,929
Inventory Change	16,721	(3,514)	3,328	8,954	7,252
Dep & Capital Adjustment	(16,044)	(16,771)	(17,946)	(19,571)	(19,524)
Net Farm Income	43,322	34,385	26,482	40,412	51,656
<b>Profitability (Cost)</b>					
Labor & Management Earnings	28,834	18,922	11,017	23,255	33,061
Rate of Return on Assets	8.0%	5.7%	3.8%	5.5%	6.7%
Rate of Return on Equity	8.6%	4.4%	1.3%	5.4%	8.0%
Operating Profit Margin	19.9%	15.5%	11.2%	15.0%	16.7%
Asset Turnover Rate	40.1%	37.1%	33.8%	37.0%	39.9%
<b>Liquidity</b>					
Ending current ratio	1.50	1.30	1.26	146%	145%
Ending working capital	27,930	19,825	16,883	40168	44506
End working capital to gross inc	12.3%	7.8%	7.6%	15.6%	14.5%
Term Debt Coverage Ratio	150.4%	125.3%	108.4%	138.7%	151.5%
Expense as a Percent of Income	75.5%	79.5%	80.6%	77.3%	77.2%
Interest as a Percent of Income	8.1%	8.2%	7.6%	6.6%	5.9%
<b>Solvency (Market)</b>					
Number of Sole Proprietors	410	467	350	440	417
Ending Farm Assets	545,906	584,734	581,959	735,057	800,022
Ending Farm Liabilities	293,143	310,047	309,796	379,431	409,364
Ending Total Assets	645,532	676,134	672,387	832,068	900,916
Ending Total Liabilities	309,895	326,428	327,015	398,318	430,308
Ending Net Worth	335,637	349,706	345,371	433,751	470,609
Net Worth Change	26,916	25,260	24,672	43,706	49,186
End Farm Debt to Asset Ratio	54%	53%	53%	52%	51%
Beg Total Debt to Asset Ratio	49%	49%	49%	49%	50%
End Total Debt to Asset Ratio	48%	48%	49%	48%	48%
<b>Nonfarm Information</b>					
Net Nonfarm Income	17,583	19,321	19,821	19,695	20,120
Farms Reporting Liv Expenses	185	203	191	131	103
Total Family Living Expense	25,254	25,584	24,982	29,023	31,585
Total Living, Invest, & Cap Purch	36,425	37,662	34,368	39,123	45,188
<b>Crop Acres</b>					
Total Acres Owned	398	396	392	401	401
Total Crop Acres	626	649	652	680	720
Total Crop Acres Owned	256	255	257	260	268
Total Crop Acres Cash Rented	350	369	365	396	433
Total Crop Acres Share Rent	21	25	30	24	19



## Crop & Livestock Trends

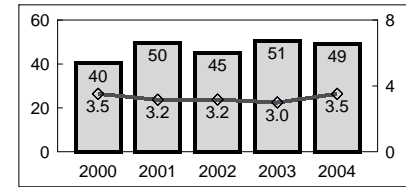
2000 2001 2002 2003 2004

Selected Data

### Alfalfa Hay

Yield per Acre	3.5	3.2	3.2	3.0	3.5
Value per Ton	\$64.40	\$69.83	\$67.99	\$69.49	\$74.49
Fuel, Oil, Repairs per Acre	\$43.89	\$46.54	\$38.78	\$41.82	\$50.99
Total Dir & Ovhd Exp per Acre	\$141.82	\$157.60	\$142.19	\$149.15	\$172.95
Net Return per Acre	\$86.28	\$69.60	\$83.99	\$66.94	\$93.95
Total Direct Expenses per Ton	\$19.46	\$23.11	\$21.64	\$24.88	\$23.69
Total Dir & Ovhd Exp per Ton	\$40.24	\$49.85	\$44.89	\$50.56	\$49.10

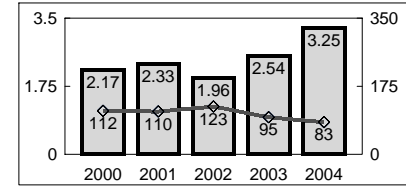
Yield and Dir&Ovhd Cost / Unit



### Corn

Yield per Acre	111.7	110.2	123.2	95.4	82.6
Value per Bushel	\$1.78	\$1.80	\$2.08	\$2.24	\$2.03
Fuel, Oil, Repairs per Acre	\$40.21	\$40.28	\$38.05	\$41.26	\$43.84
Total Dir & Ovhd Exp per Acre	\$242.05	\$256.63	\$242.00	\$242.00	\$268.22
Net Return per Acre	(\$31.72)	(\$48.66)	\$17.26	(\$13.33)	(\$37.17)
Total Direct Expenses per Bu.	\$1.40	\$1.47	\$1.26	\$1.61	\$2.13
Total Dir & Ovhd Exp per Bushel	\$2.17	\$2.33	\$1.96	\$2.54	\$3.25

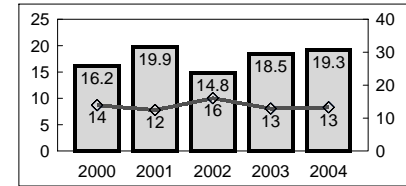
Yield and Dir&Ovhd Cost / Unit



### Corn Silage

Yield per Acre	13.9	12.5	16.0	12.9	13.3
Value per Ton	\$18.71	\$17.63	\$19.68	\$19.54	\$19.47
Fuel, Oil, Repairs per Acre	\$45.69	\$51.30	\$44.63	\$45.65	\$53.98
Total Dir & Ovhd Exp per Acre	\$225.59	\$247.58	\$237.82	\$238.55	\$255.54
Net Return per Acre	\$48.48	(\$13.78)	\$79.28	\$35.23	\$35.45
Total Direct Expenses per Ton	\$9.92	\$11.92	\$8.56	\$10.99	\$11.94
Total Dir & Ovhd Exp per Ton	\$16.19	\$19.86	\$14.84	\$18.45	\$19.26

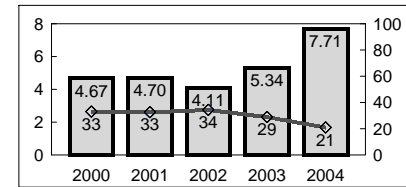
Yield and Dir&Ovhd Cost / Unit



### Soybeans

Yield per Acre	33.0	32.5	34.4	28.9	20.9
Value per Bushel	\$5.07	\$5.12	\$5.25	\$6.50	\$5.83
Fuel, Oil, Repairs per Acre	\$26.20	\$27.37	\$25.91	\$25.90	\$28.12
Total Dir & Ovhd Exp per Acre	\$154.25	\$152.93	\$141.37	\$154.53	\$160.90
Net Return per Acre	\$21.23	\$23.71	\$43.84	\$38.73	\$21.89
Total Direct Expenses per Bu.	\$2.64	\$2.68	\$2.50	\$3.24	\$4.69
Total Dir & Ovhd Exp per Bushel	\$4.67	\$4.70	\$4.11	\$5.34	\$7.71

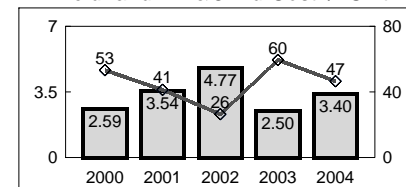
Yield and Dir&Ovhd Cost / Unit



### Spring Wheat

Yield per Acre	53.3	41.3	26.5	59.5	46.6
Value per Bushel	\$3.52	\$3.10	\$3.97	\$3.64	\$3.40
Fuel, Oil, Repairs per Acre	\$21.49	\$21.31	\$19.52	\$21.02	\$23.77
Total Dir & Ovhd Exp per Acre	\$138.11	\$145.88	\$126.28	\$148.60	\$158.19
Net Return per Acre	\$51.66	(\$7.61)	\$8.70	\$68.21	\$17.97
Total Direct Expenses per Bu.	\$1.74	\$2.36	\$3.14	\$1.69	\$2.32
Total Dir & Ovhd Exp per Bushel	\$2.59	\$3.54	\$4.77	\$2.50	\$3.40

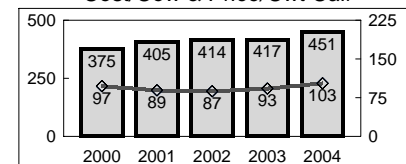
Yield and Dir&Ovhd Cost / Unit



### Beef Cow Calf

Price Recv'd/Cwt Calf Sold	\$97.37	\$89.30	\$87.24	\$92.50	\$102.97
Total Feed Cost/Cow	\$210.03	\$242.00	\$252.29	\$256.44	\$279.03
Return over Feed/Cow	\$249.56	\$188.78	\$167.93	\$235.80	\$287.67
Net Return/Cow	\$85.04	\$26.06	\$6.34	\$75.73	\$116.11
Total Direct & Ovhd Expenses	\$374.55	\$404.72	\$413.87	\$416.51	\$450.59

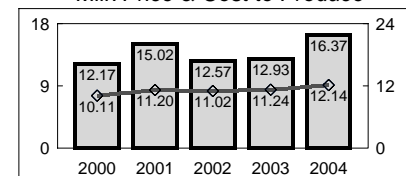
Cost/Cow & Price/Cwt Calf



### Dairy Cows

Production/Cow	19,794	19,555	20,037	19,998	20,228
Price Recv'd/Cwt Milk	\$12.17	\$15.02	\$12.57	\$12.93	\$16.37
Total Feed Cost/Cwt Milk	\$4.86	\$5.12	\$5.13	\$5.44	\$5.81
Return over Feed/Cwt Milk	\$6.96	\$9.10	\$7.20	\$7.65	\$10.03
Net Return/Cwt Milk	\$1.71	\$3.02	\$1.31	\$1.84	\$3.70
Total Direct & Ovhd Expenses	\$10.11	\$11.20	\$11.02	\$11.24	\$12.14

Milk Price & Cost to Produce



## ***Program Information***

Half a century later, after serving thousands of farm businesses, Minnesota Farm Business Management Education has celebrated its golden anniversary. Farm Business Management Education has been a part of agriculture education programs in Minnesota since 1953. From the early cooperative efforts of the State Department of Education and the Department of Agriculture Education (University of Minnesota), the program has expanded to serve over 5000 farm families each year in six Farm Management areas. Programs are now an integral part of the Minnesota State College and University System, through eight two-year Colleges.

The Farm Business Management Program is an educational program that is designed to help farm families achieve their farm business and family goals. This is done through improved management organization and efficiency of their farm operations. This purpose has not changed over the years.

The programs became credit based in the 1992 Fiscal Year. A typical farm business management student registers for 10 semester credits per year. The courses have been designed to meet the unique needs of students who enroll on a part-time basis, while operating or managing a farm business. The program relies on individualized instruction to adequately address the needs of the individual farmer, making enrollment even more beneficial. To accomplish these purposes, programs have been organized to conform to the following guidelines:

- Farm families enroll in a specific management course.
- Each course has a specific objective and units of instruction to meet the objective.
- Courses are offered in sequence and farmers are expected to enroll in the first of the sequence of courses.
- There is continuity to each course. Each leads to the next course in the sequence.
- Instruction is primarily individualized on the farm or in the office with the farm family. Additional instruction is also offered in group or classroom settings.

Northland Community & Technical College now offers the following Farm Business Management Programs:

1. Farm Business Management – Diploma Program
2. Advanced Farm Business Management – Certificate Program
3. Farm Business Management Current Topics – Certificate Program
4. Agriculture Commodity Marketing – Certificate Program
5. Advanced Agriculture Commodity Marketing – Certificate Program
6. Precision Agriculture – Certificate Program

Central Lakes Community & Technical College now offers the following Farm Business Management Programs:

1. Essentials in Farm Business Management – Certificate Program
2. Applications in Farm Business Management – Certificate Program
3. Farm Business Management – Diploma Program
4. Advanced Farm Business Management – Certificate Program
5. Agriculture Commodity Marketing – Certificate Program

Like most educational programs, members benefit from the instruction in relation to how much effort they put into study. Some farmers have benefited more and some less, depending upon how seriously they studied the results of their business analysis and the kind of decisions they made as a result of their analysis.